THE SYSTEMIC INTERACTION
OF HEALTH CARE MARKET
AND URBAN POVERTY IN TANZANIA

A dissertation submitted by

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(Tanzania)

in fulfilment of the requirements for the degree of
DOCTOR
of the International Institute of Social Studies
of Erasmus University Rotterdam
The Hague, The Netherlands

The Hague, 10 November 2009
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This dissertation is part of the research programme of CERES,
Research School for Resource Studies for Development.
Funded by NWO-WOTRO (The Netherlands Organisation for Scientific
Research) and the African Economic Research Consortium (AERC).

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Printed in The Netherlands
Shaker Publishing BV
St. Maartenslaan 26
6221 AX Maastricht
Tel.: 043-3500424 / Fax: 043-3255090 / http://www.shaker.nl
Dedicated to

Allegra & Naftal
For Your Future Inspiration

Victor
For your love and Support

Christa and Iddi Mbaga
For your Insightful Vision and Guidance
Acknowledgements

The successful accomplishment of this project has been possible through various contributions and support received from different people and organizations. I would first like to acknowledge the financial support received from the African Economic Research Consortium (AERC), which had made it possible for me to enrol for the first year of my studies. Special thanks should go to Professor W. Lyakurwa the Executive Director of AERC. I would also like to acknowledge the financial support received from NWO- WOTRO (The Netherlands Organisation for Scientific Research) together with the partner Institute, Research on Poverty Alleviation (REPOA) in Tanzania that has covered the remaining three years of my studies. In this regard, I would like to thank Professor J. Semboja, Executive Director of REPOA, for his support on this partnership. I am also highly indebted and grateful to my supervisors – Professor Marc Wuyts and Professor Maureen Mackintosh – for their continuous academic guidance, support and encouragement throughout this PhD process. I feel fortunate to have had the opportunity to learn and work with dedicated and distinguished scholars in the field. I would also like to extend my sincere appreciation for the continuous support and encouragement received from the Executive Director, Dr B. Lunogelo, Management and Staff of Economic and Social Research Foundation (ESRF) all throughout my study period. This also includes the initial guidance and encouragement received from Professor S. Wangwe and Professor H. Amani, the former Executive Directors of ESRF.

Special thanks should also go to Professor Chandan Mukherjee (Centre for Development Studies, CDS, Trivandrum, India) for his significant contribution and comments on the methodological foundation and statistical component of this project. I would also like to thank the assistant researchers of this project; Ms. Joan Mungereza, Ms. Karin Rupia and Raphael Magoha for their tireless effort especially when conducting the household survey. Special thanks should also go to the Kinondoni Municipal authority
Acknowledgements

and particularly Dr Hafidh Ameir (Research Coordinator – MMOH), Mr Ahmed Ngenje (Mzimuni Street Administrative office). I also like to acknowledge the cooperation I received from all the in-charges of health care facilities, exit patients and household members interviewed. This study would have not been completed without their valuable contributions and participation! In addition, I would also like to thank Dr F Kessy (IHI) for our initial discussions that has led to the development of the theoretical framework of this project. I also thank Mr .E. Karugendo (NBS) for his technical support on the design of the household survey and development of the household Asset Index used for this study.

I have also greatly benefitted from a range of support, knowledge and advice at various stages of this work from: Dr B. O’Laughlin, Prof Ben White (ISS), Prof Ashwani Saith (ISS), Dr Jan-Kees Van Donge (ASC, Leiden), Dr Paula Tibandebage, Dr Riziki Ponsiano (Mkuranga District Hospital/University of Hawaii ,USA), Dr P. Mujinja (MUHAS), Dr G. Kwesigabo (MUHAS), Dr. D. Kaino (ESRF), Dr O. Mashindano (ESRF), Mrs M. Nzuki (ESRF), Dr B. Mkenda (UDSM), Dr A. Mkenda (UDSM), Dr Auma Okwany (ISS), Ms. Wanyenda Kutta-Butahe (The Judiciary of Tanzania), Dr Hellen Mkondya-Senkoro (MKAPA Foundation), Dr J. Kweka (World Bank), Dr Akinyinka Akinyoade (ASC,Leiden) Dr Albert Musisi (World Bank), Dr Admasu Shiferaw (CDC), Mr Donald Mmari (REPOA/ISS), Ms Blandina Kilama (REPOA/Leiden University), Mr R. Mbuguni (Business Times Ltd), Ms Femida Yusufali (ESRF), Mr S. Libena (ESRF) and Ms Avina Achanahi (USAID). I would also like to acknowledge mama Joyce Mbwette of Footloose (T) Ltd and the artist Mr Mussa Ngosha (who lives in Ukwamani – one of the squatter area covered in this study) for designing the front cover of this thesis. In addition, Leslie O’Brien and the team of Goldenwest Editing (USA) for editing this thesis.

During these four year of my studies I have also developed close academic interaction and friendship with my PhD fellows; Rose Namara, Manohara Khada, Francisco Alar, Filmon Hadaro, Antonio Pedro, Malika Pinnawala, Victor Gedzi, Le Tan Nghiem, Atsushi Sano, Merixell Regue Blasi, John Agbonifo, Gloria Otieno, Immaculate Mogotsi, Bilisuma Dito, Rose Wambui, Moushira Elgeziri and Jerome Abban. I would also like to acknowledge various administrative staff at ISS for their efficiency and cooperation that have contributed to completion of this project: Ank van den Berg, Martin Block, and Cynthia Recto-Carreon of the students office, Mau- reen Koster and Dita Dirks of the PhD Secretariat, Marianna Sickens De Wal of the finance department, John Sinjorgo and Sylvia Cattermole of the facility department; and all the staff members of the library and computer
departments. I would also like to give my gratitude to the late Anna Fivawo-Wuysts for her kindness and support. Special thanks should also go to Naomi, Ilundi and Vincent for always making the Hague my second home!

My parents, Prof I. Mbaga and Christa Mbaga have been a continuous source of love, support and encouragement all throughout this PhD process. Special thanks should also go to my siblings and their spouses who have always been there for me – Ines & Chip, Kiri & Lil, Shnucky & Simon -! I would also like to acknowledge Mr and Mrs A. Kida and all my brothers and sisters in-laws. I also extend my appreciation to the Ewerts’ in Berlin and the Possels’ in Wolsburg, Germany.

Last but not least, my family – Victor, Allegra and Naftal---you are truly a blessing from God! Victor thanks for your support and prayers that has enabled me to achieve my dream! Allegra thanks for all your love and for the memorable time we have spent together in the Hague in 2005!! Naftal, you just came into this world at the right time, in the midst of the PhD process-- you brought more love, challenge and joy ---that has made it possible to accomplish this task on time! Finally, I thank God our Lord as all is possible through him!
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HSB - Health Seeking Behaviour
HSBF - Health Sector Basket Fund
HSRC - Health Systems Resource Centre
HSRs - Health Sector Reforms
HSSP - Health Sector Strategic Plan
IDS - Institute of Development Studies
ILFS - Integrated Labour Force Survey
ILO - International Labour Organization
ISS - Institute of Social Studies
JAHSR - Joint Annual Health Sector Review
Kg - Kilogramme
LGA - Local Government Authority
LGRP - Local Government Reform Programme
MCH - Mother and Child Health
MDGs - Millennium Development Goals
MDs - Medical Officers
MHMT - Municipal Health Management Team
MHRC - Municipal Health Research Coordinator
MKUKUTA - Mkakati wa Kupunguza Umaskini na Kukuza Uchumi Tanzania
MMOH - Municipal Medical Officer for Health
MNH - Muhimbili National Hospital
MoF - Ministry of Finance
MoH - Ministry of Health
MoHSW - Ministry of Health and Social Welfare
MPS - Malaria Parasites
MSD - Medical Stores Department
MPEE - Ministry of Planning, Economy and Empowerment
NBS - National Bureau of Statistics
NHIF - National Health Insurance Fund
NSGRP - National Strategy for Growth and Reduction of Poverty
OPD - Outpatient Department
PER - Public Expenditure Review
PHN - Public Health Nurse
PHDR - Poverty and Human Development Report
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>PO-RALG</td>
<td>President’s Office, Regional Administration and Local Government</td>
</tr>
<tr>
<td>PO</td>
<td>President’s Office</td>
</tr>
<tr>
<td>POW</td>
<td>Programme of Work</td>
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<tr>
<td>PPP</td>
<td>Public Private Partnership</td>
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<tr>
<td>PRA</td>
<td>Participatory Rural Appraisal</td>
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<tr>
<td>PRS</td>
<td>Poverty Reduction Strategy</td>
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<tr>
<td>PRSP</td>
<td>Poverty Reduction Strategy Paper</td>
</tr>
<tr>
<td>QN</td>
<td>Question</td>
</tr>
<tr>
<td>RAS</td>
<td>Regional Administrative Secretary</td>
</tr>
<tr>
<td>REPOA</td>
<td>Research on Poverty Alleviation</td>
</tr>
<tr>
<td>SDC</td>
<td>Swiss Development Corporation</td>
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<tr>
<td>SIDA</td>
<td>Swedish International Development Agency</td>
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<tr>
<td>SL</td>
<td>Sustainable Livelihood</td>
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<tr>
<td>SP</td>
<td>Sulphurdoxin Pyrimethamine</td>
</tr>
<tr>
<td>SWAP</td>
<td>Sector Wide Approach</td>
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<tr>
<td>TACAIDS</td>
<td>Tanzania Commission for AIDS</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>TDHS</td>
<td>Tanzania Demographic Health Survey</td>
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<tr>
<td>TEHIP</td>
<td>Tanzania Essential Health Intervention Project</td>
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<td>THIS</td>
<td>Tanzania HIV/AIDS Indicator Survey</td>
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<tr>
<td>Tsh</td>
<td>Tanzanian Shillings</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNRISD</td>
<td>United Nations Research Institute for Social Development</td>
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<tr>
<td>URT</td>
<td>United Republic of Tanzania</td>
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<tr>
<td>US$</td>
<td>United States Dollar</td>
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<tr>
<td>USA</td>
<td>United States of America</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>WB</td>
<td>World Bank</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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</table>
Abstract

This study analyses the systemic behaviour of the dynamics of a health care system in its interaction with poverty. Specifically, this study examine how urban poverty (including the spatial dimension of poverty) shapes the functioning of the commercialised health care system, in terms of the interplay between the institutional design, the operation of health care providers and micro-level household behaviour – in particular people’s health seeking behaviour. The deregulation and liberalisation of the health sector adopted in Tanzania from early 1990’s has brought about a dramatic shift in the system of health care delivery, from near exclusive ‘free’ public provisioning towards its extensive commercialisation that includes the liberalisation of private health care provision. The prevalence of commercialized health care in this sense: fee based, requiring out of pocket payment in all sectors, in the context of widespread poverty raises issues concerning access of the poor to health care services. In this respect, an influential view in the literature and in policy practice – postulates that the commercialization of health care services will move the better off towards the private facilities in the public-private mix, thereby freeing the subsidized public health facilities for the use of the poor (Gwatkin 2003). However, contrary to policy intentions, this study finds out the urban poor frequently find themselves excluded not only from (decent) private health care, but also from access to public health care, given the current subsidy structure, its use within an extensively fee-based (commercialized) health system – in both public and private sectors – and the prevalence of widespread poverty.

Furthermore, this study reveals existence of segmentation in provision and access of health care services in the urban health care market. The segmentation mechanism is mainly the result of the systemic process of interaction of the demand and the supply sides of the health care market.
with widespread poverty. The study reveals that segmentation of health care delivery into a two-tier system is questionable to secure better access to health care especially for the urban poor. This is mainly because greater plurality of service provisioning in urban areas have weakened the pattern of public health care provision in general and of urban primary health care units in particular. The private health care provision has also segmented into an upper-tier of better quality care for those who can afford it, and a lower tier of cheap health care of doubtful quality to cater for those among the poorer unable to access public services. In this regard, this study propose that the health reforms in practice have turn out to be quite a powerful mechanisms of social exclusion of the urban poor from access to decent health care services i.e instead of being inclusionary as intended by policy. This is to say that, given high incidence of poverty, the restructured health care systems – both private and public (involving subsidy, cost recovery through user fees and rationing – formal or informal) – de facto have affected the access to and utilization of decent health care services for the poor, in this case, the urban poor. These are important policy concerns that involves access and provision of health care services particularly in a context of generalised poverty. This study has therefore pursued a careful empirical investigation of both intended and unintended outcomes of prescribed policies – i.e. health reforms in the context of wide spread poverty.
Dit onderzoek gaat over de het functioneren van het gezondheidszorgsysteem in een omgeving waar armoede heerst. Het onderzoek richt zich in het bijzonder op de invloed van stedelijke armoede (en ook van de ruimtelijke dimensie van armoede) op het functioneren van de gecommercialiseerde gezondheidszorg. Daarbij gaat het om het samenspel tussen institutionele factoren, de werkwijze van zorgverleners en het gedrag van huishoudens op microniveau, vooral wat betreft de consumptie van gezondheidszorg.

De deregulering en liberalisering van de gezondheidszorgsector in Tanzania vanaf begin jaren 90 heeft grote veranderingen teweeggebracht in het systeem van de gezondheidszorg. Voor ‘gratis’ gezondheidszorg van overheidswege kwam gecommercialiseerde gezondheidszorg in de plaats en de markt voor particuliere gezondheidszorg werd geliberaliseerd. Het is de vraag of de armen wel toegang hebben tot de gezondheidszorg in een omgeving waar armoede heerst en waarin voornamelijk commerciële gezondheidszorg wordt aangeboden waarbij een eigen bijdrage en contante betaaling voor alle diensten vereist is. In de literatuur en in de praktijk gaat men er veelal van uit dat commercialisering van de gezondheidszorg ertoe leidt dat de rijken gebruikmaken van particuliere gezondheidszorgvoorzieningen, waardoor de armen exclusief toegang hebben tot de gesubsidieerde openbare gezondheidszorg (Gwatkin 2003). Uit dit onderzoek blijkt echter dat het tegendeel van de beleidsdoelstellingen wordt bereikt. Niet alleen kunnen de armen in de steden veelal geen (goede) particuliere gezondheidszorg krijgen, maar ze krijgen ook geen toegang tot de openbare gezondheidszorg. Dit is het gevolg van het huidige subsidiestelsel binnen de (gecommercialiseerde) gezondheidszorg waarbij er in zowel de openbare als particuliere sector een eigen bijdrage vereist is, terwijl er op grote schaal armoede heerst.

Verder blijkt uit dit onderzoek dat de verstrekking van en toegang tot gezondheidszorg in de steden gesegmenteerd is. Deze segmentatie is voornamelijk het gevolg van de dynamiek van vraag en aanbod op de markt voor gezondheidszorg in een omgeving waarin op grote schaal armoede heerst.
Het onderzoek toont aan dat een tweeledig gezondheidszorgsysteem de gezondheidszorg niet per se toegankelijker maakt voor de armen in de steden. Vooral door een grotere verscheidenheid aan dienstverleners in stedelijke gebieden zijn er in het algemeen minder openbare gezondheidszorgvoorzieningen en in het bijzonder minder stedelijke centra voor eerstelijnsgezondheidszorg. De particuliere gezondheidszorgsector bestaat ook uit een hoger segment van kwaliteitszorg voor degenen die dat kunnen betalen en een lagere segment van goedkope gezondheidszorg van bedenkelijke kwaliteit voor de groep armen die geen toegang heeft tot de openbare gezondheidszorg.

Deze onderzoeksresultaten geven aan dat de hervormingen in de gezondheidszorg in de praktijk sociale uitsluiting in de hand hebben gewerkt. De armen in de steden hebben hierdoor geen toegang tot goede gezondheidszorg, terwijl de hervormingen juist waren bedoeld om de gezondheidszorg toegankelijk te maken voor de armen. Binnen een context waarin veel armoede heerst, maakt het nieuwe gezondheidszorgstelsel het moeilijker voor de armen uit de steden om gebruik te maken van goede gezondheidszorgvoorzieningen. Dit geldt zowel voor de particuliere als openbare gezondheidszorgvoorzieningen (die gesubsidieerd worden en kosten dekken door een eigen bijdrage te heffen en de zorg – al dan niet officieel – te rantsoeneren).

Het is belangrijk om bij het maken van beleid rekening te houden met de toegankelijkheid van gezondheidszorgvoorzieningen, vooral in situaties waarin er op grote schaal armoede heerst. Daarom is er bij dit onderzoek uitgegaan van ‘beleid als proces’. Daardoor was het mogelijk om zorgvuldig empirisch onderzoek te doen naar bedoelde en onbedoelde resultaten van hervormingen in de gezondheidszorg in een context van wijdverbreide armoede.
1 Introduction to the Study

1.1 Background to Research Problem

This study analyses the systemic interaction of the health care systems with poverty incidence that is, how the operations and outcome of health care systems are shaped by the existence of widespread poverty. In this case, the focus is not just on income or asset poverty but also poverty as a vehicle of social discrimination in provision and access of decent health care services. Specifically, this study analyses how poverty (including the spatial dimension of poverty) shapes the functioning of the commercialised health care system, in terms of the interplay between the institutional design, its operation of health care providers and micro-level household behaviour; in particular people’s health care seeking behaviour. In studying this systemic behaviour, it was necessary to integrate and triangulate different phenomena and components of the health care system with poverty dynamics that is to say, looking at the same phenomena from different angles.

Tanzania witnessed the deregulation and liberalisation of the health care sector since the early 1990s as it has been part of the overall socio-economic reforms taking place in the country. These changes have brought about a dramatic shift in the system of health care delivery from near exclusive ‘free’ public provisioning towards its extensive commercialisation mainly through growing involvement of private health care provisions and the introduction of fee-based structure in public health care facilities. The commercialisation of health care therefore refers here to health care provision and access through a fee based market system in both public and private sectors. Commercialised health care in this sense is currently dominant and requires out of pocket payment in all sectors. In the context of widespread poverty this raises issues concerning access for the poor to health care. In this respect, an influential view in the lit-
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erature and in policy practice propounded, among others, by the World Bank (Gwatkin 2003) postulates that the commercialisation of health care services will move the better off towards private facilities in the public-private mix, thereby freeing the subsidised public health care facilities for the use of the poor. However, contrary to policy intentions, this study finds that the urban poor frequently find themselves excluded not only from (decent) private health care, but also from access to public health care, given the current subsidy structure, its use within an extensively fee-based (commercialised) health care system—in both public and private sectors—and the prevalence of widespread poverty.

In Tanzania, poverty is predominantly a rural phenomenon (URT 2002a). However, for three important reasons, this study addresses the urban context of Dar es Salaam. First, to view poverty predominantly (if not solely) as a rural phenomenon can (and does) lead to the neglect of the plight of the urban poor. Given that population growth is significantly higher in urban than rural areas, compounds this problem of neglect over time as urban poverty rises both in numbers and as a share of the total population.

Second, in Tanzania it is within urban areas and Dar es Salaam in particular that the development of the private sector of health care advanced farthest, where a dense network of private providers exists alongside some public provisions (Tibandebage et al. 2001). The influential view referred to above would lead us to expect that the greater availability of health care resulting from the liberalisation of private clinical provisions should go hand in hand with improving access, including access by the poor to the subsidised public facilities. However, the results from this study suggest that this is not happening as the poor are struggling to access health care services from both public and private health care providers. Given that urban poverty is severe and there are growing levels of inequality, access to decent health care services in a commercialised setting is becoming a problem for the urban poor. The results from this study indicate that the urban poor in Dar es Salaam appear markedly dependent on private sector provisions, and hence they are particularly vulnerable to problems of affordability and quality of care in both sectors.

Third, there has been also limited research on public/private interactions within the urban context of health care. If the poor lack access, does this reflect an insufficient number of public health care facilities, especially at the dispensary level, or is it a problem of access to and af-
Introduction to the Study

fordability of those that exist? If the poor relies mostly on private health care provisions, is it because public health care provisions are inadequate and/or not functioning well? Are the private health care services accessed by the poor of the same decent quality as those accessed by the better off? This study fills the knowledge gap by providing information on the sources of funding used by households for urban health care, the health care seeking behaviour and the quality of health care services accessed by the poor, the consequences for impoverishment of the vulnerable, and the gender differences in the poverty-health care relationship in urban areas. Finally, this study has also looked in depth at the behaviour of private health care facilities in an urban context as this knowledge still very patchy in the Sub-Saharan African context.

In Tanzania, for most people, access to health care services—both private and public— involves out-of-pocket payments. Exemptions from user fees for the indigent formally exist in government facilities, but hardly apply in practice, in Tanzania as in most African countries (Gilson 1997; Lorenz and Mpemba 2005; URT-MoH 2005). Moreover, exemption procedures are often unclear, particularly to those who cannot afford payments (Hutton et al. 2005). Under such conditions, commercialisation policies (in the context of widespread poverty) may counteract the stated intention to subsidise government health services for better access of care to the poor (Gilson 2005; URT 2002b, 2005). To access government-subsidised care, the poor must be able to meet the costs of user charges—a condition that is by no means always satisfied. Nor is it certain that subsidised care, which involves ‘rationing’ in public delivery, will inevitably favour the poor who not only lack money, but also voice to articulate their needs.

Finally, this study reveals the existence of segmentation in provision and access of health care services in the urban health care market. The segmented health care market is mainly the outcome of the systemic process of the interaction of the demand and supply sides of the health care market with widespread poverty. This study reveals that the bifurcation of health care delivery into a two-tier system is questionable as a route to securing better access to health care for the poor. This is because the greater plurality of service provisioning in urban areas has weakened the pattern of public health care provisions in general and of urban primary health care units in particular. Furthermore, the private health care provision has also segmented into an upper-tier of better
CHAPTER 1

quality care for those who can afford it, and a lower tier of cheap health care of doubtful quality to cater to those among the poor unable to access public services.

In this regard, this study proposes that the health care reforms in practice turned out to be quite a powerful mechanism of social exclusion of the urban poor from access to decent health care services that is, instead of being inclusionary as intended by policy. This is to say that, given the high incidence of poverty, the restructured health care systems—both private and public (involving subsidy, cost recovery through user fees and rationing—formal or informal)—de facto affected access to and utilisation of decent health care services for the poor, in this case, the urban poor. These are important policy questions/debates, involving access to and provision of health care services particularly in the context of generalised poverty. This study has therefore pursued a careful empirical investigation of both intended and unintended outcomes of prescribed policies; that is, health reforms in the context of widespread poverty.

1.2 Research Question(s)

The key research question addressed by this study is to investigate how poverty (including spatial dimensions of poverty) shapes the functioning of the commercialised urban health care system. Three key aspects of health care system functioning are studied: access to care in conditions of severe poverty; the operation of pricing and payment structure; and the role of public provision and regulation and the process of informalisation. Each aspect is investigated as an element of the interplay between health system institutional design and financing, the behaviour of health care providers and people’s health seeking behaviour.

Each aspect of this broad research question is therefore further broken down into a set of interrelated/interconnected questions structured under three headings, plus some policy questions, as follows:

(I) Access, poverty and health seeking behaviour

- What is the interrelationship between poverty, health seeking behaviour and utilisation of health care services at the household level?
Introduction to the Study

• How does access and utilisation of health care services differ between adult men and women, and children (particularly among the poor) at different health care levels?
• Are there elements of exclusion in access and provision of health care services by social class?

(II) Market segmentation, pricing and payment structure

• How do health care services (public/private) taken up by the better off differ in cost and quality from lower-tier cheaper health care used by the poor?
• What are the main factors considered by health care providers in setting prices for health care services and how this be explained?
• What are the main sources of financing health care services and expenditure patterns by social class?
• Given the widespread poverty, what are the coping mechanisms in place from both the supply and the demand side of the health care market and how do they interact?

(III) Poverty, public provision and the informalisation mechanism

• How do subsidies, the inadequacy of medical resources/infrastructure, user fees and the existing exemption system interact in shaping access of the poor to public health care services?
• How is the regulatory mechanism in health care service delivery functioning?
• What are the underlying indicators of formal/infomalisation in provision and access to health care services?
• What is the difference in quality of private health care services according to level and geographical location and how is that to be explained?

(IV) Implications for policy

• What are the lessons for improved institutional policy design, not only as prescription, but also as process, in order to reshape policy outcomes and dynamics?
• Specifically, what changes in the institutional design of health care reforms would render the health care system as a whole (public and private) more inclusionary towards the urban poor?
1.3 Context of the Restructured Tanzanian Health Care System

Tanzania went through a severe economic crisis in the 1980s, which adversely affected the management and financing of basic social services including health care services (Wangwe et al. 1998). The health care sector faced severe underfunding that affected the quality and provision of health care services. Underfunding of the health care delivery system at all levels led to, among others: shortage of drugs, equipment and medical supplies; overall deterioration of the physical health infrastructure including electricity supply, water and sanitation at the health care facilities; poor management and regulatory framework; and very low wages and other incentives for health care workers, which resulted in low staff morale. During this period, the Government was the key provider of free health care services whereas private health care provisions were nearly nonexistent except for a few faith-based health care facilities (COWI et al. 2007).

1.3.1 Major developments in health sector reforms

In addressing these problems, the primary objective of the government since early-1990s has been addressing the problem of severe underfunding and a weak management system by implementing Health Sector Reforms (HSRs), thus improving provision and access to health care services. These reforms resulted in the liberalisation of private health care policy in 1991. In 1994, following the appraisal of the health care sector performance, the government embarked on comprehensive health care sector reforms aimed at putting in place strategies to improve quality of health care services and increase equality in access to health care services. The government, together with development partners, joined in this initiative, and in 1995, the proposal for Health Sector Reforms was in place. The proposal for HSRs resulted in an agreement between the government and development partners that support the health care sector through a new framework of the Sector Wide Approach (SWAP). Therefore, by 1999 the HSR process resulted in the first Health Sector Strategic Plan (HSSP1) and the Health Sector Programme of Work (POW) 1999-2004 funded through the SWAP arrangement (See Table 1.1).
In order to enhance the management structure, the HSRs also adopted the decentralisation process that involved the decentralisation of authority and resources to the local government (district) level. Furthermore, in the early 2000s a second Health Sector Strategic Plan (HSSP2) 2003-2008 was formulated in order to address the deficiencies recognised in implementation of HSSP1 and achieving the specified goals and targets as addressed in the Millennium Development Goals (MDGs) and poverty reduction initiatives adopted in 2000. The HSSP2 mainly placed emphasis on promoting equity and improving the quality of health care services (URT 2003c). A new National Health Policy was formulated in 2002/03 also to accommodate the new changes in the health sector.
1.3.2 Liberalisation of private health care provisions

The health sector reforms resulted in the liberalisation of private health care provisions in 1991. The Tanzanian Government banned private clinical practices in 1977 and during this period, the government was playing the central role in provisions and regulation of health care activities in the country. The outcome of liberalisation of private health care services led to a rapid increase in private health care facilities in the country. Table 1.2 indicates that by 2001, 21 per cent of registered dispensaries were in the private sector, and this is likely an underestimate (Tibandebage et al. 2001). Furthermore, according to (URT – MoHSW 2008), by 2006 the country had an extensive network of an estimated 5,728 health care facilities (4,940 dispensaries, 565 health centres and 225 hospitals). Of these 5,728, it is estimated that 60 per cent are owned by the government and the remaining by voluntary, parastatal and the private sector. The main challenge in the current HSRs is to ensure that there is progress in promoting the Public Private Partnership (PPP) in the effort to develop a more effective mix of service delivery. This is because the recent evaluation of the health care sector indicates that there is poor collaboration between the government and the private sector including a weak regulatory structure to monitor the activities of the private sector and the prevailing atmosphere of mistrust between these two sides (COWI et al. 2007).

1.3.3 Introduction of cost sharing and risk pooling mechanisms

The liberalisation of the health care sector was also associated with the introduction of user fees in the public health care provision. This decision came after the government realised that it was not in a position to afford to provide free essential health care services of acceptable quality to all Tanzanians. In this regard, the intention of introducing user fees was to generate additional revenue to facilitate improvement in availability and provision of quality health care services (URT – MoH 1994). This move led to a commercialisation of health care services, as defined earlier is a fee-based market system involved in provision and access of health care services in both public and private sectors. The introduction of a user fee came in phases and this move entailed the beginning of commercialised public health care provision. In 1993/94, the user fee introduced at the referral, regional, district hospitals, and by 2004, was eventually rolled out to primary health care facilities, public dispensaries and
health care centres. The result was that by the mid-2000s, almost all consultations and treatments at all levels from both public and private facilities required payment mainly through out of pocket payment system.

In order to promote equity in accessing health care services (following the introduction of the user fee) there were several mechanisms designed to ensure people have the ability to finance health care services and those unable to afford payment are not excluded from the system. These initiatives include the establishment of a public exemption and waiver system, introduction of Community Health Fund (CHF) and establishment of a National Health Insurance Fund (NHIF) as an insurance plan mainly for civil servants and their dependants. The exemption and waiver system was introduced with the intention of protecting vulnerable social groups and the very poor. In other words, avoiding exclusion and enhancing equity in accessing health care services (Mamdani and Bangser, 2004).

Table 1.2
Mainland Tanzania: Health care facilities and bed numbers, 1992 and 2001

<table>
<thead>
<tr>
<th>Year and level</th>
<th>Ownership</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Government</td>
</tr>
<tr>
<td>1992</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>77(44%)</td>
</tr>
<tr>
<td>Health Centre</td>
<td>265(96%)</td>
</tr>
<tr>
<td>Dispensary</td>
<td>2218(74%)</td>
</tr>
<tr>
<td>Hospital beds</td>
<td>12015(50%)</td>
</tr>
<tr>
<td>Health centre beds</td>
<td>5509(58%)</td>
</tr>
<tr>
<td>2001</td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>85(41%)</td>
</tr>
<tr>
<td>Health Centre</td>
<td>292(73%)</td>
</tr>
<tr>
<td>Dispensary</td>
<td>2683(61%)</td>
</tr>
<tr>
<td>Hospital beds</td>
<td>15454(52%)</td>
</tr>
<tr>
<td>Health centre beds</td>
<td>6184(69%)</td>
</tr>
</tbody>
</table>

Note: *In 1992, ‘other’ has been put in this column. No privately owned facilities were licensed before 1991.* Percentage figures have been rounded off to zero decimal digits
Sources: URT 1993, 2002c
CHAPTER 1

However, the literature documents that these measures are not functioning adequately to achieve these intended objectives (URT-MoH 2005). The external evaluation of the health care sector conducted in 2007 indicates that the cost sharing system also had limited success in achieving its stated goals of raising additional revenue for health care, improving the quality of services and improving the operation of the referral system. Furthermore, there are also problems associated with the functioning of the CHF and NHIF including weak management and very limited coverage of these initiatives (COWI et al. 2007).

1.3.4 Health sector finance

In line with the ongoing reforms, health care was one of the priority sectors in poverty reduction efforts (URT-PRSP 2000) and received high priority in the current National Strategy for Growth and Reduction of Poverty (NSGRP) (URT-VPO 2005). In relation to health care, the NSGRP identified two broad outcomes: (i) improved quality of life and social well-being, with particular focus on the poorest and most vulnerable groups; and (ii) reduced inequalities in provision and access to health care services across geographic, income, age, gender and other groups. In this regard, within Poverty Reduction Initiatives, the health sector benefited from increase in absolute level of government funding and from development partners; mainly through a Sector Wide Approach (SWAP).

Furthermore, through the SWAP initiative, the Health Sector Basket Fund (HSBF) was established in 1999 in collaboration with development partners to finance the Ministry of Health’s annual plan of action. The HSBF entails pooling funds into one basket with the aim of providing budgetary support allocated according to Government priorities, within the approved budget framework. Following the establishment of HSBF, the level of nominal and real spending in the health care sector has been rising rapidly since the early 2000s. Figure 1.1 shows an increase in the absolute level of health care spending in both nominal and real terms for the period FY2003 to FY2006. For example, in FY2006 the total nominal budget increased by 38 per cent as compared to FY2005.

Furthermore, there is also an improvement in the health sector budget per capita following the improvement in health care sector expenditures. Table 1.3 indicates that the health sector budget per capita improved from the FY2003 figure of US$5.04 per capita to US$7.21 per
Introduction to the Study

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capita in FY2005 and to the expected US$9.92 per capita expenditure in FY2006. Though this shift is substantial, it is still lower than the Government target of US$12 per capita expenditure by the year 2005. With costs in the health sector escalating and health care expenditure below targets, there is a need for the government and development partners to increase adequate funding to the health sector (URT-MoH 2006; COWI et al. 2007).

Figure 1.1
Trends in nominal and real health spending, FY2003 to FY2006

![Graph showing trends in nominal and real health spending from FY2003 to FY2006.](image)

Source: MoHSW-PER 2006

The decentralisation programme is in place and the HSRs are being implemented within the boundaries of a decentralised local government structure. Following implementation of the Local Government Reform Programme (LGRP) in early 2000, decisions regarding personnel planning and financing of health care service delivery were decentralised to the district levels. The vision behind it was that it would enhance transparency and accountability of resources allocated to health care and improve access of care for the poor. However, the challenge is how to en-
sure an effective participatory system involving community members and beneficiaries in planning, implementation and monitoring processes (Ti-bandebage 2003).

### Table 1.3

*Spending Trend in Per Capita US dollars, FY03 to FY2006*

<table>
<thead>
<tr>
<th>Source: MoHSW-PER 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Per Capital USD</strong></td>
</tr>
<tr>
<td>5.04</td>
</tr>
<tr>
<td><strong>Nominal Spend</strong></td>
</tr>
<tr>
<td><strong>Population Estimates</strong></td>
</tr>
<tr>
<td><strong>Exchange Rate</strong></td>
</tr>
</tbody>
</table>

Source: MoHSW-PER 2006

### Figure 1.2

*Allocation of sector budget by administrative levels, FY2003-FY2006*

Source: MoHSW-PER 2006
In line with the decentralisation programme, the MoHSW was to increase funds allocated to the local government level. This was to enhance health care service delivery at the most accessible level for the majority of health care service beneficiaries. However, the recent trend indicates recentralisation of the budgetary resources instead of increased decentralisation of resources as intended by the policy (see Figure 1.2). For example, the allocation to the Local Government Authorities (LGA) shows a decline from FY2004 to FY2005 and stagnation in FY2005 and FY2006. Although this change might seem small, it indicates a worrying reversal of policy intentions. This move implies that fewer resources will flow to primary levels of health care where the majority of the poor people are supposed to have access to adequate and quality public health care services.

1.3.5 Organisation of the health care delivery system:
Referral structure

The structure of Tanzanian health care delivery is based on a referral system between different tiers of care. This referral structure mainly attempts to ration scarce and expensive services by distancing them from direct contact with the patient through intermediate service tiers. The health care provision is mainly classified into four tiers. The idea is that lower level facilities can provide the most basic services, and to refer those needing more advances and sophisticated services to higher levels of care (Garner and Lorenz 1995: 53). The health care tiers used are as follows:

- **TIER 1 – Primary (Dispensary level):** First contact for patients and involves minimum health care package.
- **TIER 2 – Advanced Primary (Health Care Centres):** Manage referrals from tier 1: inpatients, trauma, outpatients, in-patient and obstetric care.
- **TIER 3 – Secondary (District and Municipal Hospitals):** Manage major inpatient care and has resident specialists.
- **TIER 4 – Tertiary Level (National, Regional and Specialised Hospitals):** Provides highly specialised care, includes national medical teaching institutions.

However, the literature indicates that in many urban areas, those seeking care often bypass the lower tiers of public health care and go directly
to the outpatient clinics of higher tiers (Akin and Hutchinson 1999; Garner and Lorenz 1995). This creates a problem of congestion in outpatient sections of referral hospitals and therefore, inefficiency in provision of services in these hospitals, which arguably should be specialising in the severe health care problems that require more, sophisticated treatment (Montgomery et al. 2003: 291). This problem has also been revealed in the Tanzanian case, as the joint external evaluation report of the Tanzanian health care sector (1999-2006) indicates that there is little to no evidence of improvement in the operation of the referral system (COWI et al. 2007). The main reasons for this behaviour are thought to be related to poor access and/or quality of care provided by these bypassed facilities, which are mostly primary health care facilities. Researchers and policy planners need to explore the views of the urban population with respect to health care options available, their experience in health care utilisation and the links between different tiers in urban settings (Atkinson 1999:1).

1.4 Poverty and Indicators for Health Care Status in Tanzania

Overall, the level of poverty remains very high, and social indicators, including health, are still poor in Tanzania. According to the Household Budget Survey (HBS 2000/01), 36 per cent of Tanzanians are below the basic poverty line and 19 per cent are below the food poverty line. Poverty remains largely a rural phenomenon with 39 per cent of population below the basic needs poverty line compared to 18 per cent in Dar es Salaam and 26 per cent in other urban areas (HBS 2002). These results are also supported by the preliminary findings of the 2006/07 Household survey, which indicates a minimal improvement on poverty levels between these two periods. According to these results, 33.3 per cent of Tanzanians are below the basic poverty line and 16.5 per cent are below the food poverty line. Poverty remains a rural phenomenon with 37.4 per cent of population below the basic needs poverty line compared to 16.2 per cent in Dar es Salaam and 24.1 per cent in other urban areas (URT-NBS 2008).

Furthermore, there is generally a high level of inequality in the Dar es Salaam region as compared to the rural areas. Analysis of the 1991/92 and 2000/01 HBS indicates that the overall income inequality as measured by the Gini coefficient has slightly increased from 0.34 in 1991/92
to 0.35 in 2001/01. However, the inequality level increased substantially in urban Dar es Salaam, where the Gini coefficient increased from 0.30 in 1991/92 to 0.36 in 2000/01 (URT-MPEE 2005). The preliminary findings of the 2006/07 Household survey also indicate the Gini coefficient still to be higher in Dar es Salaam (0.34) as compared to 0.33 in other rural areas (URT-NBS 2008). In addition, the unemployment rate (15+) is also substantially higher in Dar es Salaam compared to other urban and rural areas. According to the Integrated Labour Force Survey (ILFS 2006), the unemployment rate (15+) for Dar es Salaam is 31.5 per cent whereas in other urban areas it is 16.5 per cent and only about 7.5 per cent in rural areas (NBS 2006).

### Table 1.4
**Key indicators of Tanzanian health status: Targeted to NSGRP and MDGs**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Baseline</th>
<th>Current Status</th>
<th>Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life Expectancy at Birth</td>
<td>50 1985</td>
<td>51 2002</td>
<td>52 2010</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1000 Births)</td>
<td>99 1996</td>
<td>68 2004</td>
<td>50 2010</td>
</tr>
<tr>
<td>Under-five Mortality Rate (per 1000 Births)</td>
<td>147 1995</td>
<td>112 2004</td>
<td>79 2010</td>
</tr>
<tr>
<td>Maternal Mortality Rate (100,000 Births)</td>
<td>529 1996</td>
<td>578 2004</td>
<td>265 2015</td>
</tr>
<tr>
<td>Proportion of Births Attended by Skilled Health Care Worker %</td>
<td>36 1995</td>
<td>46 2004</td>
<td>80 2010</td>
</tr>
</tbody>
</table>

Source: PHDR (2007) and URT (2006) MDGs indicators are for mainland Tanzania

Health indicators are common measures for the improved quality of life and well-being of Tanzanians. In this section, the status for key indicators for health care (based on recent available data) is compared to the targets stipulated in the National Strategy for Growth and Reduction of Poverty (NSGRP/MKUKUTA) and Millennium Development Goals (MDGs). The information provided in Table 1.4 reveals that the indicators for health care status in Tanzania are still poor despite some modest improvements in the past decade. This implies still more efforts are required to improve Tanzanian health care status. For example, there is an alarming trend in maternal health care indicators. The maternal mortality
ratio calculated by the Tanzania Demographic Health Survey (TDHS) 2004/05 is 578 deaths per 100,000 live births. This implies that one woman dies every hour from maternal complications in Tanzania (URT-MPEE 2007). Furthermore, the data also indicates that very few women have the opportunity to have a skilled health care worker attend them during delivery (only 46 percent in 2004). The Infant Mortality rate and the Under-five Mortality rate remain high compared to the NSGRP and MDGs targets despite the improvements recorded in recent years (URT-MPEE 2007).

1.5 Organisation of the Thesis

This thesis contains eight chapters. Chapter 1 provides the background to the study, the key research questions that the thesis addresses, the context of the restructured Tanzanian health care system and the status of poverty in Tanzania. Chapter 2 provides the theoretical framework and presents the analytical contribution of the thesis. That is, review of the following main components of theories and concepts: the conventional market theory; the theories of institutional and organisational behaviour in the health care system; health care seeking behaviour models; the context of urban community and the spatial dimension of urban health care provisions; conceptions of poverty and access to health care services with the sustainable livelihood focus. Chapter 3 covers the methodology used for this research. The adopted methodology brings together three distinct branches of study and elements of their methodological approaches within a single research design: micro-level household behaviour (based on the survey design), the pattern of operation of health care providers and the institutional design and pattern of operation of health care systems.

This thesis has four empirical chapters. Chapter 4 examines the aspects of spatial and wealth differentiation on health care seeking behaviour and utilisation of health care services. Chapter 5 focuses on market segmentation and competitive pressure on pricing and payment structure. Chapter 6 analyses the public health care provisioning system and questions the reasons for weak reliance of the urban poor on the public health care facilities. This chapter uncovers the reasons for the ‘out flow’ of the poor to the private health care provision. Chapter 7 analyses the informatisation mechanism as a response to poverty interacting with an unregulated health care market, with the focus on private health care
provisioning. Chapter 8 provides the main findings of the study, draws some conclusions and policy implications.

Notes

1 Although this is very useful, it should be taken with caution because a significant proportion of the MoHSW headquarter’s budget reflects some items indented for lower levels of the health care system (URT-MoHSW 2006: 6).
This chapter provides a theoretical/analytical contribution that addresses the key research question (See Section 1.3 in Chapter 1). The analytical contribution developed by this research explains how poverty shapes the functioning of the health system in terms of the interplay between its institution design, operation of health providers and people’s health seeking behaviour. It depicts that the poverty incidence affects both the demand and supply sides of the health care market, which in turn results in segmentation of access to and provision of health care services.

The analytical framework developed by this research has its foundation in the following theories and conceptual tools: conventional market theory and its application to the health sector (the model of perfect competition and the market failure); institutional and organization organisational behaviour (the interaction of the demand and the supply sides); models of health seeking behaviours and the spatial dimension of urban health care provision; and conceptions of poverty, livelihood approach and access to health care services.

2.1 Conventional Market Theory as Applied to the Health Care Market

A market is an environment where suppliers (producers) and demanders (consumers) exchange goods and services at a price. The market mechanisms govern the allocation process of supply and demand sides through information conveyed by market forces. The health care market can also be explained using the traditional economic tools and principles.
2.1.1 The Conventional Model of Perfect Competition

This section therefore uses the conventional model of perfect competition to analyse the market structure of the health care system. Competitive model assumes a market structure where suppliers and demanders are ‘price takers’, and therefore simply determines their best response given those market prices (Varian 1990). In this regard, by analysing the demand and supply sides of the health sector the health care market may be understood. This is essential because there are some elements in the health care market that diverge from the conventional theory of the market governed by the competitive model that is, market failure.

The model of perfect competition is an extreme case of market structure seldom seen in the real world. However, the model’s assumptions are still significant in understanding the behaviour of the market and as a base in correcting market failure. The understanding of competitive market structure is important as it generates a **Pareto efficient outcome**. An economic outcome is **Pareto efficient** if there is no way to make one person better off without making anybody worse off. The perfectly competitive market produces a Pareto efficient outcome under certain specific conditions (Varian 1990). ‘Pareto efficient outcome occurs when the amount of output to be supplied in a single market is that amount where the demand and supply curve cross, since this is the only point where the amount that the demanders are willing to pay for an extra unit of output equals the price at which suppliers are willing to supply an extra unit of output’ (Varian 1990: 413). When the market is operating efficiently, the goods and services produced will match the demand by consumers that is, the marginal cost of producing additional good/service becomes equal to the market price of that good/service and equal to the marginal benefit of purchasing that good/service in the market. The consumers will only purchase additional goods and services based on their ability to pay and their willingness to pay. That is to say, the interactions between the demand and supply sides results in the market **clearing price level**. In this regard, the price of goods and services supplied plays an important role in the overall allocation mechanism of goods and services in the market.

The following conditions are necessary for a market to allocate resources efficiently or, perfectly competitive:

(i)  Sufficient numbers of buyers and sellers (no monopoly power).
(ii)  No entry/exit barriers.
(iii) Product is homogenous (no brand names). All producers supply the exact same good to avoid segmentation of the market due to differences of goods or services produced.

(iv) Existence of perfect information.

(v) Operate in absence of externality.

(vi) No risk or uncertainty.

(vii) Actors in competitive markets are either consumers maximising their utility or producers maximising their profits.

In most cases, this is an abstract model, not designed to have its assumptions applied directly in the real world. However this model leads to a better understanding of the problem of market failure. In addition, the assumptions of the perfect competitive model also apply as an analytical benchmark of equilibrium price setting.

2.1.2 Market failure in the health care sector

The conventional competitive market analysis is not easily applicable to the health sector. This is because the health care market differs in many aspects from the main assumptions of perfect competitive market. In most cases, the consumption of health care services is not by choice; rather, circumstances (ill health) force people to demand such services. As McGuire et al. (1988: 184) put it: ‘Not only do consumers have to be ill to consume health care and—illness itself is the source of disutility—but sometimes the cure itself can also be a greater problem than the disease.’ Therefore, the demand for utilisation of health care services is primarily because the consumer (patient) hopes it will contribute to the recovery of his/her health.

The model of perfect competition in the health care market receives criticism for deviating from the main assumptions of perfect competition. Williamson (1973) reveals that the health care market is facing significant transaction costs as the number of conditions different from the competitive model dominates the resource allocation process. These divergences include bounded rationality; uncertainty /complexity in decision making; opportunistic behaviour arising from the pursuit of self interest through the lack of honesty in transactions; asymmetric information; and atmosphere, which relates to the fact that decision making and the transaction process itself directly affect utility. Therefore, the market failure in the health sector is attributed to the presence of several conditions that impacts competitive market structure.
The theoretical framework discusses the main factors contributing to market failure in the health sector (Folland et al. 1997; Arrow 1963; Williamson 1973):

(i) **Barriers to Entry:** There are existing barriers to enter the health care market, including licensing mechanisms, price controls, restrictions on advertising, ethical standards, and investment costs for health care facilities.

(ii) **Asymmetric Information:** The model of perfect competition requires both the supply and demand sides to have complete information about the market. In health care markets, the level of information is imperfect and asymmetrically available to both parties. For example, physicians are more informed about the required treatment than patients.

(iii) **Presence of externalities in the health sector:** The health care market faces the impact of externalities. For example, in the case of communicable diseases, the treatment provided to patients will prevent the spread of the infection to others.

(iv) **Additional Motivation:** The health market has additional motivation other than pure profit.

(v) **Presence of extent of unpredictability:** Problem of unpredictability exists in the health care market, both on the demand and supply sides. Consumers cannot predict their health status, and clinicians/physicians cannot guarantee the expected results to the consumers of health care services.

Furthermore, analysis of the key features of demand and supply sides enables significant understanding of the factors that cause market failure in the health sector. The interaction of these two sides is important in attaining efficiency in delivery of health care services.

### 2.1.3 The behaviour of markets in which firms have market power: intermediate markets

In the above sections, the dynamics of perfectly competitive market structure has been explained, taking into account the role of pricing, and followed by an account of market failure in the context of health care markets (see sections 2.1.1 and 2.1.2). However, there are also other conventional models of market structures. These features the characteristics of imperfect competition, including oligopoly and the
monopolistic competition model, and lie between the two extreme market models of perfect competition and pure monopoly. The oligopoly and monopolistic competition models are characterised by small number of firms, which exhibit market power: that is, firms have some ability to set prices above the perfectly competitive market price level. In these intermediate markets there is also a degree of interdependency between suppliers in such a way that the decision/action made by one firm depends on the decision/action made by other firms: oligopoly models focus on this interdependency.

The features of perfectly competitive markets therefore differ from markets that feature imperfect competition. The traditional theories of competition stipulate that as the concentration of the market declines, competition will increase and therefore the prices will eventually fall. We would expect to find that suppliers in highly competitive markets act as price takers, while in markets with smaller numbers of suppliers and lower competitive pressure, firms have more scope for price setting.

These theories of competition may or may not be directly applicable in the health care sector. It is observed that in some contexts lower market concentration (that implies more competition) in health care markets is associated with higher prices. Models that seek to explain this observation include models of competition through increase in quality of care instead of a decline in prices. This model of quality competition assumes profit-maximising suppliers. If it costs a health care provider less to gain additional customers by increasing quality than by reducing price, then the supplier will increase quality.

The underlying assumption is that the ‘quality elasticity of demand’ is higher than the price elasticity. This assumption may be questioned in the urban context of developing countries, since it is generally thought to apply where consumers are not very sensitive to prices due to extensive insurance coverage. The model invites us to consider whether there is a segment of the urban health market in which quality dominates in consumers’ utility functions (McPake et al 2002 p.138).

A second model that may explain rising prices in response to competition is the Supplier-Induced Demand (SID) model: According to Folland et al (1997: 181) “Supplier Induced Demand (SID) refers to the phenomena of physicians (providers) deviating from their agency responsibilities to provide care for their self interests rather than their patients. In this regard SID represent one of the major intellectual and pol-
icy controversies in health economics’. The problem of information asymmetry and the agency relationship within the health care markets creates potential problem of treating ‘health care’ as any other economic commodity.

The main argument underlying the debate around SID is that health care providers can take advantage of the problem of asymmetry of information and use their advancement of knowledge to influence the demand of health care services for their own self interest. There is strong policy concern that SID can also lead to the problem of market failure in the health sector. Regarding the problem of SID Reinhardt (1989) is questioning whether health care markets function according to the conventional supply–demand market structure. He is therefore quoted as follows: “The issue of physician-induced demand obviously goes straight to the heart of probably the major controversy in contemporary health policy, namely, the question whether adequate control over resource allocation to and within health care is best achieved through the demand side – or through regulatory controls on the supply side’. In the perfectly competitive market model, the consumers are sovereign and therefore determine the kinds of goods and services supplied in the market. However, in the case of SID the demand side is strongly influenced by the supply side i.e. market forces are not in good position to control price, consumption of health care services and therefore allocate resources efficiently. The next section looks at the overall institutional and organisational behaviour of the health sector, and the supply and demand sides of the health care market are analysed in detail. The section will also provide an analysis of the incentive structure and the market segmentation theory regarding their influence on the functioning of the health care market.
2.2 Institutional and Organisational Behaviour: The Interaction of Supply and Demand

2.2.1 Asymmetry of information, agency relationship, and incentives

The model of perfect competition assumes that the demand and supply sides are fully informed about prices, quality and quantities of services/goods offered in the market. However, the health care market has a problem of *asymmetry of information* whereby both supply and demand sides have different levels of information. In the health care market, supply side is more dominant than demand side. This unbalanced relationship is regarded as one of the main causes of market failure in the health sector. In this market, the consumer (the patient) depends more on the information provided by the supplier (provider) on their health care status, treatment and the expected outcome. The consumer’s utility assessment relies on the information provided by the supply side, the provider of health care services. Therefore, due to the problem of asymmetric information, the *agency relationship* between the demand and supply sides develops.

The agency relationship in the health care market is explicable using the *principal – agent models*. One party *the principal* contracts another party *the agent* to perform some action and/or make some decision on behalf of the other party. The agent is usually contracted because he/she has information power over the principal (Laffont and Martimort 2002). In the health care market, consumer’s health care decisions largely depend on decisions from the supply side. In this relationship, the patients (principal) delegate the authority to the provider (agent) for the suggested services. The principal accepts that he/she is relatively uninformed about his or her health care status/ needs and that the insufficiency is well taken care of by having a knowledgeable agent. In this regard, information asymmetry and agency relationship are closely related phenomena (Folland et al. 1997).

Therefore, due to the aspect of agency relationship that exists in the health care market, conducive, incentive structures need to be in place especially on the supply side of the market (providers) in order to enhance their performance and integrity to achieve the desirable outcomes. The organisational arrangement of the health care system defines the incentive context for health care workers that, in turn influences both
The theoretical framework of incentives for health care workers has been developed to improve organisational and individual performance (Hongoro and Normand 2006). **Incentives** for health care workers have been defined as ‘all the rewards and punishments that providers face as a consequence of the organizations in which they work, the institutions under which they operate, and the specific interventions they provide’ (WHO 2000: 61). The incentive packages comprise the financial and non-financial incentives that provide reinforcement to each other. Generally, the purpose behind the design of incentives in the health care systems is to achieve the following: encourage providers to furnish specific services; encourage cost containment; support staff recruitment and retention; enhance productivity and quality of services; and allow for effective management (Hongoro and Normand 2006: 6).

Gilson et al. (2005) developed the notion of trust, which also links with the aspects of incentives in order to achieve improvement of health worker performance. One argument is that, in the health care market there are two sets of relationships that are important in order to improve health care provision: (i) patient and provider (ii) health worker and their employer (See Figure 2.1). It is possible to improve the relationship between the health care worker and their employer through improving the health care providers trust in their workplace. Once health care workers have a good relationship with their workplace, the expectation is that their attitudes and behaviour towards patients will also improve, that is improved patient—provider relationship. **Trust** is a relational notion: ‘it generally lies between people, people and organisations, people and events. It may also be considered as self trust’ (Gilson 2003: 1454).

The incentive structure, workplace trust and the overall institutional performance of the health care system are closely interlinked. This is because improving the trust of the health care workers in their workplaces needs to take into account the personal characteristics, incentives structure and the overall institutional performance. The following aspects of management and mixed system of incentive structure (financial and non-financial incentives) are important for strengthening this relationship (Gilson et al. 2005: 1420):
• ** Organisation structure**: leadership, recruitment process, in-service training, staff appraisal and reward system, defining jobs and the degree of worker autonomy allowed.

• ** Supervision**: consistency and fairness in evaluation and working regulations.

• ** Working atmosphere**: conducive working atmosphere amongst colleagues and group performances.

The interaction of supply (provider) and demand (patient) sides of the health care market is influenced by the strength of relationship between the two sides. Once there is a defined management, regulatory and the
incentive structure on the supply side, the relationship between the providers and the patients is also strengthened and hence improvement in overall performance in the health system. That is to say, **Improved Health Workers Relationship with the Employing Organisation → Improved Patients & Providers Relationship → Improved Overall Performance.**

This study is interested in the strength of the relationship between the providers and consumers of health care services. Due to the existence of an agency relationship in the health care market, the aspect of patient-provider relationship is central in the health care provision system (Mechanic 1996, 1998). The successful provision of health care services depends on the confidence, acceptance and utilisation of services from the demand side. The institutional set up in the overall health care provision system also facilitates and shapes this relationship. This includes assurance of standard and reliable supply of health care services, a need to ensure adherence of professional and ethical codes, a quality training system together with the licensing and supervision procedures (Mechanic 1998; Perry et al. 1999). Furthermore, Gilson et al. (2005: 1418) argue that "respectful treatment is a fundamental issue on the demand of primary care service users, in terms of positive attitudes/behaviours, thoroughness and technical competence, as well as institutions that support fair treatment".

Figure 2.2 provides an analytical framework regarding the interaction of the demand and supply sides that enhances the patient-provider relationship. It explains that on the demand side, the patients demand a respectful treatment (positive attitudes/behaviour, thorough and technical competence) achievable mainly through the enhancement of factors that influence the organisational and incentive structure on the supply side of the market. Furthermore, the patient–provider relationship is embedded in the overall socioeconomic context.

The interaction between providers and consumers is critical for provision and utilisation of health care services. The supply side needs to explore and understand the actual needs and health care decisions of their clients and their expectations in respect to treatment. The demand side also needs to be facilitated and encouraged to take an active role in the overall consultation process. In this way, the knowledge of health care providers will improve and therefore be able to define clear expectations of their clients (i.e. the feedback mechanism can improve their perform-
It is also essential to provide adequate incentives, good working conditions, availability of medical supplies and adequate time in order to improve efficiency on the supply side and therefore access to decent health care services on the demand side.

**Figure 2.2**
Patient - provider relationship

| 1 = Strength of Patient – Provider Relationship |
| 2 = Demand of Respectful Treatment (Positive attitudes/behaviour, thorough and technical Competence) |
| 3 = Organizational and Incentive Structure (Aspects of Management, Organizational and Incentive) |
| 4 = Socio-Economic Context (Relationship of the health care system in the overall socio-economic context) |

Source: Author/Modified from Gilson (2003: 1464)

### 2.2.2 Derived demand and utilisation for health care services

There is a debate in health economics literature regarding the applicability of conventional theory of demand to consumption of health care services. The conventional theory of demand regards the consumer as the sovereign and subject only to budgetary considerations (McGuire et al. 1988; Folland et al. 1997). However, as explained earlier, the health care consumer faces the problem of information asymmetry and therefore
falls into the agency relationship with the provider of health care services. In this case, the consumer lacks all the necessary ‘technical’ information on the relationship between health care and health status to make a preference comparison and be able to define the expected results. The consumer is in a good position to judge utility gains/losses associated with consumption of health care after the act of consumption has already taken place.

‘A major conceptual advance in the analysis of the demand for health care has been the recognition that the fundamental demand by the consumer is for “health” and not “health care” per se. The demand for health care is therefore a derived demand.’ (McQuire et al. 1988: 129).

Consumers utilise health care services with the anticipation that they will contribute to the improvement of their health care status. In this regard, there is no market for ‘health’ but rather for health care services including medicines. Resource exchanges occur between providers and consumers of health care services with the assumption that the health care status of the consumers will be supported/managed. This notion of derived demand for health care services is also supported by the theory of human capital (Grossman 1972). Grossman reveals that the demand for health diverges from the traditional approach to demand. This is partly because consumers invest in themselves through health care to increase their earnings. The consumer demands medical care to attain good health, which will eventually support him/her in production activities.

Therefore, the pure demand variable (as indicated in the conventional theory of demand) is difficult to attain in the health care market. As mentioned above, this is mainly due to the problem of information asymmetry or, involvement of suppliers in health care consumption decisions. Most health care literature indicates the demand for health care to reflect utilisation for health rather than demand per se. The recognition of utilisation as a relevant concept acknowledges that consumption decisions of the consumer in the health care market relies upon information provided by the supplier (McGuire 1988).

Furthermore, an ‘episode’ is the common unit of analysis to define utilisation. In this way, the utilisation concept can be easily associated with conventional notions of demand. In other words, ‘an illness episode relates to a particular combination of health care services which form a complete flow of services for a particular treatment’ (McGuire 1988: 68).
Utilisation of health care services takes into account the consumption of health care services based on consumer initiation of demand for health care together with the providers initiated activities. Through acknowledgment of the influence from the supply side in demand for health care service, the utilisation concept has become a useful link to the conventional measures of demand.

2.2.3 SEGMENTATION IN THE HEALTH CARE MARKET: APPLICATION OF CLASSIC THEORY OF LABOUR MARKET SEGMENTATION

The concept of segmentation as it has been analysed in the theories of labour market entails a process of compartmentalisation and isolation of different groups of participants in the labour market. The interest in this concept is in particular on the product or the outcome of this state of compartmentalisation (Ryan 1981: 3-4). Market segmentation is therefore a process that leads to distinct market segments, which possess dissimilar characteristics and/or behave in a different manner.

Michael Piore introduced the classical theory of labour market segmentation in the 1970s in an attempt to understand the labour force problems of the disadvantaged in the urban context of the United States (Doeringer and Piore 1971). The theory stated that the labour market is essentially divided into two distinct segments, referred to as the primary segment and secondary segment. The primary segment is characterised by high priced labour (jobs with relative high wages), good working conditions with advancement opportunities while the secondary segment is having mostly temporary labour, low paying jobs, poor working conditions with low prospects of career advancement. Some refer to this market as the ‘double’ or ‘dual’ market (Piore 1973; De Grip et al. 2006). This dual market brings about the crowding effect, which is associated with elements of exclusion and price differential between these two segments of the market. The crowding effect occurs because the primary segment has an exclusion mechanism in place through limited entry into the market that is it has a rigid internal career structure. In this case, not everyone can get into the primary segment so they are crowded into the secondary segment, and therefore the price of labour is pushed down.

The secondary segment of the market, having few or no barriers to entry, becomes easily crowded and therefore its labour price is pressed down, whereas in the primary segment, the price of labour is high as its supply is limited.
A new generation of segmentation theory developed incorporates the earlier idea of existing segments in the labour market as well as recognising the social and spatial processes that lead to segmentation in the labour market (Peck 1996). Some argue that social and spatial dynamics matter in facilitating the segmentation process. In most cases, the poor are in the marginalised spatial communities that lack basic infrastructure and adequate working opportunities. In this thesis, the classic theory of labour market segmentation is used as a starting point for study of the recent development of the health care market in a developing country. The thesis argues that the concept of market segmentation can be applied in research on the health care market. It examines emerging aspects of price and quality differentials, and looks for evidence of the process of crowding into a lower segment of the market, alongside exclusion from the upper segment, and differences of institutional behaviour between segments. The existing studies in access and provision of health care services indicate elements of fragmentation in urban health care markets of developing countries (Tibandebage et al. 2001; Mackintosh and Tibandebage 2002; Tibandebage and Mackintosh 2005). This study has taken a step farther by looking at the segmentation as an outcome of how poverty (including spatial and other social dynamics of poverty) shapes the performance of the health care market.

Understanding the segmentation mechanism is also important in emphasising equity consideration in the health care market. Since the 1980s, the health sector has considered equity an important goal. However, inequities between the poor and the better-off still persist and therefore more deliberate efforts and commitment by the respective governments (including the health care systems) need to be strengthened in order to attain the intended equity objectives (McIntyre and Mooney 2007; O’Donnell et al. 2008). Sen (2002) argues that the existing inequality in the health sector is worrisome—more worrisome than inequality in most other sectors. This is because health and health care are important components of people’s ability to function. In this regard, existing debates concerning equity objectives are still relevant in health policy research and the following elements should continue to receive considerations. Health care is a right, there are limited resources for health care and health care systems should design a ‘just’ mechanism for allocating the limited health care resources, and therefore improving equitable access, especially to the poor (Aday and Andersen 1981; O’Donnell et al. 2008).
2.3 Conceptualising Health Seeking Behaviour (HSB) and Spatial Dimension of Urban Health Care Provision

The concept of Health Seeking Behaviour (HSB) is widely used in health development and medical anthropology literature (Suchman 1965; Chrisman 1977; Kleinman 1980; Mackian et al. 2004). HSB is primarily a tool to explore relationships between population and their engagement /interaction with the health care system. Studies differ depending on whether they are looking at the process or the end-point of health care seeking. There is a clear distinction between the concept of utilisation and health care seeking behaviour. Utilisation studies focus primarily on recording the end-point of the process, in which an individual/population decided to use health care services. While studies that analyse the process of HBS are based on the analysis of determinants that influence illness response, factors which may or may not involve the use of any particular service, and may result in a single, or a succession, of health care seeking acts (Tipping and Segall 1995). Furthermore, analysis of HSB places the seeker of health care services in a broader social context to take into consideration the location of household in relation to available health care options.

Two approaches dominate analysis of the HSB. These are the ‘Pathway’ and ‘Determinants’ models. Pathway models focus on the individual process in seeking health care services, taking into account cultural aspects and social regulations that govern access to health care services. Determinants models are based on the measurable factors that influence the level of use of health care services (Mackian et al. 2004).

2.3.1 Pathway models of HSB

Pathway models provide an understanding of the series of steps that an individual takes when seeking health care. The steps begin with perception and evaluation of symptoms, which in turn leads to the use of health care services (Fabrega 1975; Young 1981). The utilisation of health care services ranges from home treatment, biomedical treatment, traditional and spiritual healers. The pathway models consider health care seeking as a process and therefore follows a sick person from the initial stage of recognising illness to the utilisation of health care services, and finally to evaluation of the treatment received (Kleinman 1980).
The pathway models of HSB provide a thorough analysis of why, when and how individuals, households and communities in general seek access to health care services. However, pathway models narrowly elaborate on the concept of access to health care services. These models provide a basic pattern of seeking health care services They usually provide the understanding of ‘rules and norms’ associated with seeking health care services including the diverse source of help, either in parallel or sequentially during the course of an illness. Therefore, these approaches raise concerns about values, norms, social relations, institutions and power in seeking health care services (Obrist et al. 2007). Mackian (2004) argued that since HSB is a social process involving individual interaction with a social network, it is important to look at the decision making process underlying the health seeking behaviour in this context.

**Figure 2.3**

*Good’s model: Importance of significant others*

Source: Good (1987)
Good (1987) provides an example of the pathway model to HSB, which puts emphasis on the importance of ‘significant others’ and the overall decision making process towards seeking health care services. This emphasises the role of extended groups of relatives and friends in seeking health care services from different health care providers; traditional treatment, self-treatment and biomedical treatment. The consumption of these therapy choices sometimes interlink in other words, consulted at the same time (See Figure 2.3). However, in the course of an illness episode, the involvement of support groups in illness management can also change. ‘The pathway models acknowledge these dynamics of illness and decision making’ (Hausmann-Muela et al. 2007:15).

2.3.2 Determinants models of HSB

Determinants models of HSB analyse key factors that determine population health care seeking behaviour. Determinants models define access to health care services as a concept that represents the degree of ‘fit’ between the individual who is seeking health care services and the health care system (Penchansky and Thomas 1981). The models put forward the following key factors that influence health care seeking behaviour:

(i) **Availability**: The availability of the health care services, including the geographical distribution of health care services to meet clients’ needs

(ii) **Accessibility**: The link between the location of the supply and the clients including factors like distance, transport availability and condition of roads.

(iii) **Affordability**: The ability of the clients to afford health care services given their income. This includes the direct, indirect and opportunity costs associated with receiving care.

(iv) **Acceptability**: This relates the characteristics of the clients with those of the provider. It takes into account the cultural and social determinants towards seeking health care services.

(v) **Adequacy**: Involves people’s judgement over the quality of care provided, the association between the clients’ demands and organisation of health care services.

Determinants models acknowledge that in order to improve access to health care services, clients must have their needs and realities well ac-
commodated in the overall health care system. Barriers to utilisation of health care services range from the personal (acceptability) to aspects of affordability and accessibility of health care services (Gulliford et al. 2002). The services provided have to be available and of good quality for people to have confidence in them.

The health care utilisation model (Andersen Model) as developed by Andersen and Newman (1973) summarises three sets of determinants that influence health seeking behaviour and hence utilisation of health care services. These are predisposing characteristics, enabling and needs factors (See figure 2.4). *Predisposing factors* take into account demographic factors, status of the person (age, sex, education etc.), knowledge about the illness and general attitude towards seeking health care services. *Enabling factors* take into account adequacy of financial resources, availability of sources of care and social network support. *Needs factors* take into account both the ‘perceived’ and ‘evaluated’ needs. ‘Perceived needs refer to how people view their own state of health, how they experience symptoms of illness, pain and worries and whether they judge their problems to be of sufficient importance and magnitude to seek professional help in a health care facility. Evaluated needs represent professional judgement about people’s health status and their need for medical care’ (Access 2007). This model has recently been modified to include factors of the health care system (policies and organisational), external environment (economic factors) and personal health practices (diet and exercise) (Weller et al. 1997).

![Figure 2.4 Andersen Model](image)

Source: Andersen 1995

The health seeking behaviour models also have some limitations. They tend to take a limited focus on the provider’s factors (supply side) that influence the health seeking behaviour of the client (demand side).
In some cases, they tend to blame the individuals as being responsible for inadequate health seeking practices. In this case, the capacity of the demand side on the steps taken to access health care services tends to be overestimated. The models also take limited consideration of the emotional aspect and irrational behaviour that strongly influence the process of health seeking behaviour or, unbalanced power relationships within households, peer pressure and similar. Furthermore, the identified key factors that influence health care seeking practices need to take into account the socioeconomic context in which they occur (Hausmann-Muela 2003).

2.3.3 Complexity of urban community in health care delivery system

The importance of community involvement in the delivery of health care services, particularly primary health care, began to receive emphasis in the late 1980s in developing countries with the vision that community participation would enhance efficiency, promote self-reliance and better control on provision of primary health care. However, observers note difficulties in organising community involvement in the delivery of health care in the urban setting (Harpham and Tanner 1995).

One of the main problems is how to define an urban community given the heterogeneity and mobility of urban dwellers (Atkinson and Merkle 1994). In urban settings, the word community can have several usages and several functional definitions. Community can be defined according to geographical limits, or by likeness of physical structures such as similar connected housing, or by shared characteristics (cultures, traditions or functions of individual members), who may not be living in geographical proximity to each other (Loewy 1987; Rifkin et al. 1988). Urban communities can identify themselves in different dimensions, be it ethnic, cultural or linguistic (Silimperi 1995: 11). The urban population is also dynamic and therefore the definition of community changes over time.

Various forms of community participation in addressing health care needs in urban areas have been developed. These include advocacy, information sharing, direct service provision/supervision of health care provision, financial and material support, and management of health services provided in/for community (Silimperi 1995: 14-17). However, Silimperi further reveals that urban poor communities are likely to be
excluded from this form of participation due to their lower education levels, unemployment and limited knowledge of the urban power structure. This implies that urban poor communities find it difficult to organise themselves, mobilise resources for their health care needs and/or collaborate with better off communities.

Wyss and Lorenz (2002) also acknowledge that the community participation process in primary health care levels is misrepresentative, especially for the urban poor. Evidence from Douala, N’Djamena and Dar es Salaam show that women, representatives of the poor and other disadvantaged groups rarely gain appointment or election to committees and boards that govern provision of public primary health care services. The culture or opportunity cost facing this group might be the reason behind this phenomenon. Therefore, the urban health care provision system needs to take into account the heterogeneity and mobility of urban population.

2.3.4 Spatial dimension in urban health care provisions

This study addresses an urban context and therefore there is a need to understand the spatial dimension of urban health care provisions. Living in an urban area does not necessarily imply access to decent health care services. In most urban areas, rapid population growth or urbanisation, is a significant problem with a direct link to the increased proportion of urban poor who experience both social and economic deprivation (Harpham and Tanner 1995). The marginalised, urban poor are mainly in high density and squatter areas, which, in most cases, lack decent infrastructure including health care services. Dymski (2004) indicates that there is a close relationship between poverty and spatial location of households in urban settings. The spatial characteristic shapes the character and degree of poverty in the society. This is because of the diversified structural characteristics between the spatial differentiated communities.

Urbanisation leads to increased demand to public services, including health care services. This increase in demand must coincide with an increase in provision of health care services, and in particular primary health care services. However, in many developing countries the focus on primary health care mainly flows to rural areas. However, since urbanisation is increasing, along with the proportion of urban poor, there is a need to review the applicability of rural primary health care experi-
ences for use within urban areas (Atkinson et al. 1996; Wyss and Lorenz 2002). Furthermore, many studies in developing countries revealed the existence of intra-urban inequities in mobility, mortality and access of care (Bradley et al. 1992; Wagstaff 2002). Therefore strengthening access to decent health care for all urban citizens is an important challenge and a crucial element against poverty reduction strategies and underdevelopment.

Wyss and Lorenz (2002: 6), in their study on primary health care in three cities in sub-Saharan Africa, (N'Djamena in Chad, Douala in Cameroon and Dar es Salaam in Tanzania) highlighted key areas that need to be considered when dealing with health care delivery in urban areas. These issues have been summarized as follows:

- **Super Positioning of Different Levels of Health Care System:** There is a problem of bypassing lower levels of public health care to higher tiers; this creates a problem of inefficiency and overcrowding at higher levels.

- **Epidemiological Transition:** Changes in epidemiological profile for example high prevalence of HIV/AIDS, TB and mental problems created new health care needs and demand in urban areas.

- **Community Participation:** Complexity of community participation in urban health care delivery

- **Plurality of Health Seeking Behaviours:** Presence of plurality of providers results in plurality of health seeking behaviours: traditional or modern, government or private, private for profit or private non-profit, informal or formal, etc.

2.4 Conceptions of Poverty, Livelihood Approach and Access to Health Care Services

This section deals with conceptualisation of poverty through analysing its multidimensional context. Furthermore, the section also looks at the sustainable livelihood approach to poverty and its applicability in analysing access to health care services.
2.4.1 Conceptions of poverty: Multidimensional phenomenon

The conceptualisation of poverty changed in the past quarter century from focusing only on the income dimension of poverty to recognising other causes and multidimensional aspects of poverty. The multidimensional definition of poverty also recognises human development, aspects of social exclusion and concerns of vulnerability, risk, powerlessness and lack of voice (Laderchi et al. 2003; Kanbur and Squire 2001). Analysing poverty by taking into consideration its multidimensional aspects is essential not only theoretically but also practically, that is for matters of strategies and policy (Wuyts 2004). Therefore, as the concept of poverty expands, a broader range of policies and policy instruments becomes available to deal with the effort of poverty reduction. Furthermore, this conceptual development also calls for a deeper understanding of interaction between different policy packages and outcomes.

Kanbur and Squire (2001) argue that broadening the definition of poverty does not significantly change who counts as poor, but has great influence on our thinking about adopted strategies for poverty reduction. The multidimensional definition of poverty leads to a better characterisation of poverty and of the problems facing the poor, and it therefore enhances our understanding of poverty and, more specifically, the problems facing the poor. This is significant especially when it comes to the design and implementation of specific programs and projects to help people escape poverty. “The broader definition changes significantly our thinking about strategies for reducing poverty. As more aspects are recognised, a larger range of policy instruments becomes relevant to the task of reducing poverty” (Kanbur and Squire 2001: 184-216).

This section covers the four main approaches as stipulated in the broader definition of poverty. That is, poverty as shortfall of consumption/income; poverty as capability deprivation; poverty as a product of vulnerability and powerlessness; and poverty as a product of social exclusion. The following explain these approaches.

(i) Poverty as a shortfall of consumption/income (monetary approach)

The view of poverty in this approach is mainly in terms of insufficient money to pay for the minimum necessities of life; that is, lack of monetary means (income) to finance consumption. This approach defines poverty by focusing on the individual level with little consideration for social interactions or interdependencies in the broader context. This ap-
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approach uses a poverty line expressed in monetary terms. The poverty line is an externally given cut off point, below which people are poor. That is, they no longer have certainty of access to a minimum level of resources. ‘A poverty line is thus defined in terms of monetary costs required to cover given minimum requirements deemed necessary for survival i.e. the cut-off point is set in absolute terms’ (Wuyts 2004: 11).

However, the absolute poverty line incorporates some relative elements. This is mainly because of varied perception of defining minimal requirements in different societies and the fact that standards do not remain constant in a given society over time (Laderchi 2003). The main challenge in this approach is that in translating the assessment of poverty from the individual level to an aggregate societal measure, the social interactions are only considered from a mechanical point of view (Wuyts 2004: 12). Furthermore, this approach has limited focus on the social resources important in determining individual achievements in some fundamental dimensions of well being such as health and nutrition (Laderchi 2003: 252).

(ii) Poverty as a capability deprivation (the capability approach)

The capability approach originates from the work done by Amartya Sen, who argued that development should be perceived as an expansion of human capabilities, and not through focusing on monetary income alone (Sen 1985, 1997, 1999). The capability approach (CA), centres on the indicators of freedom to live a ‘valued’ life. In this approach, the view of poverty is deprivation of capabilities or failure to achieve certain minimal (basic) capabilities. The basic capabilities are ‘the ability to satisfy certain crucially important functioning up to certain minimally adequate levels’ (Sen 1993: 41). In this approach, a person is poor when unable to secure a minimally adequate quality of life.

Therefore, the capability approach takes into account the human development approach to poverty reduction. Human potential is viewed as important for individuals to live valued lives. The emphasis of this approach lies on the outcome reflected in the quality of life of the individual(s). The approach mainly focuses on functioning achieved for example, life expectancy, morbidity, literacy and so on. ‘Monetary resources are considered as a means of enhancing wellbeing rather than outcome of interest’ (Laderchi et al. 2003: 253). The use of social indicators in defining poverty is important as they provide additional information not
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captured in the conventional monetary approach to poverty. To improve welfare of the poor, the interaction between income and capability measures is important. These two approaches to poverty can reinforce each other, and the welfare of the poor can double, resulting in increased consumption and improved social wellbeing (Wuyts 2004). However, both approaches take an individualistic perspective based on external assessments/inputs. They both aim at describing the situation at a specific point in time without directly analysing the causes of poverty. The social exclusion and participatory approaches explained below both differ from these mentioned aspects.

(iii) Poverty as product of vulnerability and powerlessness
(participatory approach)

The participatory approach to poverty analysis, pioneered by Chambers, has the distinct feature of taking into account the views of the people to participate in decisions about what it means to be poor and the magnitude of poverty they are facing (Chambers 1994, 1997). Findings from the participatory approach play an important role in complementing and questioning the results realised from conventional poverty assessments (Salmen 1995). Vulnerability and powerlessness (lack of voice) are two important aspects captured in participatory assessments (Kanbur and Squire 2001).

Vulnerability entails both the exposure to external shocks, stress, risks and the inability to cope without damaging loss (Chambers 1995). Analysis of vulnerability and risk is significant as ‘poverty is not about a state of having little but the danger of losing the little that the poor is possessing’ (Wuyts 2004: 19). Sen (1981, 1984) defined poverty as resulting from entitlement failure in that it entails a mechanism that leads some people (not all) to fall into impoverishment and destitution. Sen argues that the endowments that people possess and the set of alternative commodity bundles that they can obtain by using their endowment in the market determine entitlements. Entitlement failures occur through the collapse of individual endowments or through unfavourable shifts of exchange entitlement mapping. Therefore, entitlement failure is fundamentally related to the notion of vulnerability. Vulnerability is built into the nature of endowments possessed by an individual and into the context in which these endowments are being used. In this regard, public action to protect people against impoverishment should take into ac-
count both causes of vulnerability and of security (O’Laughlin and Pouw 2004: 5-15).

**Powerlessness** is another aspect captured by the participatory approach. This concept analyses poverty by looking at the relationship between those in power and the poor, in determination of public action for poverty reduction (Wuyts 2004). Powerlessness links to the inability of the poor to make their voices heard. There is also a close link between economic and political power. The poor are usually disadvantaged not only in economic resources but also in political power, and thus they are unable to make their voices heard (Kanbur and Squire 2001). Furthermore, the improved participation of the poor in the policy design and formulation process through ‘bottom–up approaches’ often have a positive impact on improving the voices of the poor in this process and hence improve their welfare.

The main drawbacks of a participatory approach are from the methodological point of view. There is a problem in aggregation of the voices of the poor to reflect the community perspective. This is because in most cases these assessment are externally designed/ managed i.e. managed by the people from outside the community. In this regard, it is possible to fall into a problem of selectivity of the issues to be raised and discussed (Laderchi 2003).

(iv) *Poverty as a product of social exclusion*

Social exclusion is defined as the process through which individuals or groups are wholly or partially excluded from full participation in the society in which they live (European Foundation 1995). Atkinson (1998) identifies three main components of social exclusion: agency (exclusion through action of an agent); relativity (exclusion as a relative phenomenon to a given society); and dynamics (both current and future prospects are relevant circumstances). Therefore, this approach mainly focuses on the social dynamics in place that lead to exclusion and bring about disadvantages to the poor in society. The approach provides an understanding of the social process of becoming poor and the outcome of deprivation between different social groups in a society (Laderchi et al. 2003). Social exclusion operates in multidimensional phenomena; in many cases, those who are excluded in society are being deprived in more than one dimension. The analysis of social exclusion also provides an understanding of the structural characteristics in a given society. The concept uncovers the
dynamics of how distribution and redistribution of resources work in a society. This is significant as through improved redistribution of opportunities and outcomes in a given society the condition of the poor can improve.

2.4.2 Sustainable livelihood approach to poverty: DFID framework

The above section shows that the conceptualisation of poverty has developed from income and expenditure approaches to recent approaches that give more attention to quality of life. The capability and participatory approaches recognise that, apart from income, there are other ingredients important to an individual’s well being, for example health, education, decent sanitation facilities and water services. Since the mid-1990s, the concept of Sustainable Livelihood (SL) has also become more pronounced in response to the departure from focusing only on the outcome of poverty to also looking at determinants of poverty, taking into account vital aspects of poverty such as vulnerability and social exclusion. The sustainable livelihood approach takes into consideration factors and processes that either limit or facilitate the ability of the poor to make a living in a sustainable manner. Chambers and Conway (1992) introduced this approach.

The sustainable livelihood approach recognises that the poor are better judges of their own situation/needs, and therefore it is important to involve them in the design and implementation of polices and programmes that concern them. Also, the approach realised that poverty as perceived by the poor is not only a matter of low income but also other dimensions of life such as bad health, poor social service provision, poor infrastructure, lack of voice as well as a state of vulnerability. However, there is no unified manner of applying the SL approach. Different organisations such as the British Department for International Development (DFID), the World Bank, CARE, Oxfam and others have used the SL approach to develop slightly different analytical frameworks (tools) for programme planning and assessment or as a self-standing programme. However, the different frameworks developed share three basic features: focus on the livelihood of the poor (analysis focused on people’s own perspectives and the impact of different policy and institutional arrangements on people’s livelihoods); holism places great emphasis on involving people in the identification of livelihood related opportunities and constrains, including, where applicable, implementation of activities;
and macro-micro link, where macro–phenomena affect livelihoods at the micro level (Krantz 2001, Farrington et al. 1999). However, the critical challenge in the livelihood approach is in linking micro-processes to a broader context (O’Laughlin and Pouw 2004b).

Most agencies have been using the SL approach to facilitate planning concrete projects and programmes (e.g. UNDP and CARE), while for DFID the SL approach is mainly used as a basic framework for analysis rather than as a procedure for programming (Odebode 2004; Krantz, 2001). This study therefore uses the DFID approach to provide further understanding of the SL framework and thereafter to link it to the applicability on access of health care services with a focus on livelihood. The DFID approach uses a modified version of the original definition of SL as developed by Chambers and Conway (1992), ‘A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets while not undermining the natural resource base’. This definition does not include the condition that a sustainable livelihood should also contribute to the net benefit of other livelihoods.

The DFID approach to SL considers that people engage in a range of livelihood outcomes by which they intend to increase their assets and therefore reduce vulnerability. The DFID SL framework takes into consideration four main components: (i) livelihood assets (core elements of livelihood); (ii) vulnerability context (shocks, trends and seasonality); (iii) transforming structure and processes; and, (iv) livelihood strategies and livelihood outcomes (See Figure 2.5).

The five types of assets (financial, natural, human, physical and social capital) are core elements in constructing the livelihood of the poor in the DFID SL framework. The asset base of poor people is important since this is what they usually fall back on in vulnerable situations. The availability of these assets to poor people is important in order to produce desirable livelihood outcomes. ‘The point of development interventions should be to empower the poor people to build upon their diverse assets’ (O’Laughlin and Pouw 2004b: 8). The vulnerability context takes into account shocks, trends and seasonal factors in how they affect the livelihood of people. The transforming structures and processes provide an understanding of the role of government, and the private and civil
sectors in influencing the livelihood process. The organisation of the framework emphasises the inclusion of the poor in the development process, focusing on social analysis that ensures the process does not marginalise the vulnerable group. The framework therefore advocates the importance of an adequate asset base, supported with effective functioning structures and processes to achieve the desired livelihood outcomes.

**Figure 2.5**

*DFID Sustainable Livelihood Framework*

The SL approach also has some weaknesses. The approach is silent on the process of identifying the poor. The approach does not explicitly indicate the influence of informal social and political structures at the community level on distribution of resources and other livelihood opportunities; and the approach is quiet on gender aspects in terms of the inequality that exists between men and women in the livelihood process (Krantz 2001).
2.4.3 Access to health care services with a livelihood focus

The performance of the health sector is relevant in the development process and in the overall poverty reduction effort. Recently, an attempt has been made to situate access to health care within a wider poverty alleviation framework. Obrist et al. (2007) have put forward the Health Access Livelihood Framework (HALF) that links access to health care services to a broader livelihood context (See Figure 2.6). The HALF is based on the DFID SL framework, which has been used widely for poverty reduction efforts at the local level (See Section 2.4.2). The HALF is therefore a modified version of the DFID SL framework that puts em-
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emphasis on access to health care services, its determinants, processes and results (ACCESS 2007). Therefore, the HALF links with the pathway HSB approach (See Section 2.3.1) when a person recognises an illness and decides to seek health care services either in biomedical care (public or private) or to traditional healers and other alternative health care. The step of seeking care is determined through five dimensions of access: availability, accessibility, affordability, adequacy and acceptability (See the determinants model for HSB, Section 2.3.2).

The HALF framework has four main components: (i) vulnerability context and livelihood assets; (ii) policies, institutions and processes; (iii) health care services; and (iv) determinants of access and health care outcomes (See Figure 2.6). The HALF stipulates that the main determinants of accessing health care services depend on the magnitude of the capacity of the people to mobilise and acquire the livelihood assets that is, the social, natural, physical, human and financial capital. However, the interplay between the vulnerability context and the broader policies, institutions, organisations and processes that govern the provision of health care services influence the acquisition and mobilisation of these assets. The HALF also indicates that to reach the desired outcome, improved access to and utilisation of health care has to be associated with high quality of care. The desired outcomes are then accessible through improved health status, patient satisfaction and equity (Obrist et al. 2007: 2).

The Access framework has provided a substantive analytical contribution by linking access of health care services with the livelihood focus. However, the framework has the following limitations/drawbacks:

- The framework does not indicate clearly the link between poverty and the supply side of the health care market.
- The framework does not recognise the result of segmented health care market as an outcome of poverty and the way it shapes the functioning of the health care systems.
- The framework fails to indicate clearly the links between different aspects/components shown in the framework. Some of the arrows indicated in the framework do not provide logical explanations of impact on the interactive process for example, the vulnerability context and provision of health care services.
Therefore, in the next section, this study will address some of these points through the development of its own analytical framework that links the impact of poverty on the demand and supply sides of the health care market.

2.5 Analytical Contribution: How Poverty Shapes Demand and Supply Sides of the Health Care System?

This research locates its main analytical argument in the impact of poverty and the way it shapes the functioning of the demand and supply sides of the health care system. This analytical framework hypothesises a two-way relationship and the empirical chapters will explore this relationship: (i) Poverty instigates segmentation in the health care market and; (ii) The segmented health care market intensifies the incidences of poverty. There is a hypothesis that the interplay between high incidence of poverty and the health care system (from demand and supply sides) results in segmentation of the health care market that is, poverty shapes in a segmented manner the health care seeking behaviour and provisions of health care services. However, once a segmented health care market has been achieved, it negatively affects provision of and access to health care services, especially for the poor, and therefore accelerates poverty (both in depth and magnitude).

This argument has its foundation in the theories and concepts provided in the earlier four sections of this chapter: the conventional (health) care market theory; institutional market theory (the incentive structure and the theory of market segmentation); models of health care seeking behaviours and the spatial dimension of urban health care provision; and conceptions of poverty, livelihood approach and access to health care services. Specifically, this analytical argument forms its base in the DFID SL framework and its extension to the HALF as applied to the health care system.

Poverty instigates health care market segmentation

Figure 2.7 seeks to establish that a high incidence of poverty affects both demand and supply sides of the health care market. On the demand side, poverty incidence through the context of vulnerability can influence livelihood assets (social, natural, human, physical and financial capital), especially those of poor people. As has been indicated in the earlier discus-
sion, the poor have little but they are also vulnerable to lose what little they have. The vulnerability context through exposure to shocks, risk and the existence of diversified ability to cope (without damaging loss) brings about inequality resulting from the diversified portfolio of livelihood assets in society. It is expected that given the highly commercialised nature of the current health care market, the level of livelihood assets an individual possesses have a major influence on the ability to secure health care services. Therefore, this study will establish that the inequality formed amongst users of health care services will in turn bring about segmentation in patterns of health care seeking behaviours and ultimately on the utilisation of health care services between different groups in society. Given the current payment system and low level of insurance coverage in the health care system, the better-off are expected to seek and utilise health care services from facilities that offer good quality but too often expensive health care services. Meanwhile the poor are expected to access health care services of inadequate quality.

On the supply side, the analytical framework depicted in Figure 2.7 establishes that a high incidence of poverty also causes segmentation on the supply side of the health care market. The high incidence of poverty at the national level is expected to have a direct influence on the ability to finance adequately public health care provisions. In turn, this affects the magnitude and quality of public health care services offered, on which the poor rely. There is also an expectation that poverty incidence impact the provision of private health care services. The provision of private health care services depends heavily on the capacity of users to finance the provided health care services. In this regard, a weak/fragmented insurance system and heavy reliance on out of pocket payments will lead to an unequal capacity to finance health care services in society and segmentation in private health care provision. There is expected to be an observable differentiation in institutional behaviour on the supply side. Those private health care facilities targeting the better-off are expected to be financially stable and offer a variety of good quality health care services due to a high capacity of users to finance the services. Those facilities serving the poor, mainly lower level private health care facilities located in poor areas, are expected to provide lower quality health care services due to the lower ability of users to finance the services. Furthermore, Bennett et al. (1994) reveals that private providers are in general profit-seeking and are driven by market forces, therefore
serving the poor adequately might not only be challenging but also be a secondary consideration after financial survival. This is because any services that are not profit generating are likely to be ignored, particularly preventive health care services.

**Figure 2.7**  
*Poverty Instigates Segmentation in the Health Care Market*

**Segmented health care market intensifies poverty incidence**

This study also seeks to establish that once the health care market has become segmented, a feedback mechanism develops that will lead to further intensification of the poverty incidence. On the demand side, the existence of a ‘dual market’ on prices and quality of services offered and taking into consideration the diversified ability of users to finance health care services will lead to the formulation of different coping strategies by users in order to enable them to access health care services. For example,
the informalisation process in health care seeking behaviour and payment mechanisms are expected to be developed to support this process. Furthermore, the existence of the commercialised health care delivery system and the unequal ability of users to finance health care services might lead to marginalisation and exclusion from access to health care services, thereby contributing to the high incidence of poverty. The poor might fail to access decent health care services due to inability to pay, weak protection mechanisms in public health care provisions, weak risk pooling/insurance mechanisms and, in some cases, due to depletion of livelihood assets to finance health care services that occur as in the case of prolonged illnesses. On the supply side, the segmented health care market is expected to lead to a differential in pricing and quality of care.
provided associated with aspects of informalisation mechanisms in pro-
vision of health care services across distinct segments of the health care
market. In this regard, the differentials in quantity, price and quality of
health care services supplied to the market are expected to have a direct
influence on access to care especially by the poorer groups in society,
hence an intensification of poverty incidence.

Notes
1 The right hand side arrow in Figure 2.3 indicates that the therapy choices are
sometimes interlinked (i.e. traditional practitioner, self treatment and biomedical
practitioner).
2 Recent extension to DFID SL framework includes Political Capital.
3.1 The Linkage between Theory and Method

The methodological foundation of this research is based on a research problem that seeks to analyse the systemic interaction between poverty incidence and the way it shapes the operationalisation of the health care system (See Section 1.2). This research problem has been addressed based on the developed analytical framework as presented in Chapter 2, Section 2.5. The in-depth analysis of this research problem requires a feasible method that examines this systemic relationship from different perspectives. In this regard, the scope of this research brings together three distinct branches of study in the health care system and elements of their respective methodological approaches within a single research design. (i) Institutional design and patterns of operation of health care delivery systems. (ii) Supply side of the health care market, in other words, the pattern of operation of health care providers, including the behaviour of private providers. (iii) Micro-level household behaviour (demand side); in particular, health seeking behaviour and its interaction with poverty incidence.

The methodological foundation of this study is particularly interested in gaining in-depth data and information in order to analyse how poverty shapes health sector systemic outcomes, not only income or asset poverty, but also poverty in a spatial dimension and as a vehicle of social discrimination (Dymski 2004). This chapter is therefore divided into two main parts: the first half involves pre-fieldwork (pre-data collection) activities that set up the methodological design of the study (Sections 3.2 to 3.6); and the second half involves the post-fieldwork that involves the construction and validation of the two main poverty indices (asset based and spatially based) to be used in this study (Section 3.7).
The field research for this study consists of a household survey and structured/semi-structured interviews with municipal authorities, health care providers and exit patients. The household survey has been the core component of this research carried out within the confines of a single urban ward in Dar es Salaam rather than sampling across different wards (and across different municipalities). This survey also resides within a broader socioeconomic and policy context. Specifically, the focus of this survey is to collect data and information that enables exploration of existing interrelationships between poverty, health seeking behaviour and utilisation of health care services at this level.

Furthermore, additional information came from the municipal level authority with jurisdiction over the selected ward and from the health care facility level where health care providers and exit patient interviews took place. The methodology used in this research sought to analyse in depth aspects of provision and utilisation of health care services. This study therefore explores in detail the interactions between institution and regulatory mechanisms, facility behaviour and household behaviour that produce health care access outcomes in context. The mix of quantitative and qualitative data has been integrated, cross validated and cross-referenced to produce contextual analysis and understanding in the precise sense as established by Hentschel (1999) for health studies.

### 3.2 Research Area

The field research focuses on Kawe ward, located in Kinondoni Municipality of urban Dar es Salaam. Kawe ward is located along the shores of the Indian Ocean and is well known in Dar es Salaam as there used to be a famous meatpacking factory, Tanganyika Packers Limited, located in the area, occupying about 270 acres. This factory was important as it provided employment for people within and outside the ward, and attracted diversified small-scale businesses around it. However, the factory closed in the early 1990s, affecting the livelihoods of many people within and outside the ward (REPOA 2002: 3). Figure 3.1 shows the location of Kawe ward within Kinondoni Municipality.
Administration

Kawe ward comprises of six administrative streets (hamlets): Mzimuni, Ukwamani, Mbezi Juu, Changanyikeni, Makongo Juu and Mlalakuwa. Each street has its own administrative office under the leadership of a street chairperson ‘Mwenyekiti wa Mtaa’. The street chairperson reports all its administrative and development issues to the ward level administration. The ward administration thereafter reports on behalf of street level administration to the municipal authority and vice versa. The street level administration is further broken down into ten-cell units. Each ten-
cell unit comprises a minimum group of ten households under the leadership of a ten-cell leader known as a *mjumbe*. Either the household members elect the *mjumbe* or he is a volunteer on behalf of the other household members. The ten-cell leader acts as a close link between the households and the street administration. Figure 3.2 below provides a chart that indicates the various administrative levels from the municipal level to the household level.

![Figure 3.2 Municipal Administration Levels](image)

**Reason for choice of survey area**

There are two main reasons for the choice of Kawe ward as a study area. First, this is quite a large ward, which features both low and high-density areas, respectively indicative of richer and poorer populations, thus al-
lowing for sampling across a wide wealth/income range. In addition, the ward has a varied infrastructure for health care, including both public and private health care facilities at different levels. Therefore the choice of this ward enabled in-depth understanding of the operationalisation of the health care system, and more particularly how this operation produced adverse effects and dynamics (vicious cycle) that go counter to stated intentions or widely-held perceptions (say, within the policy arena).

Second, this research did not intend to sample households randomly across the whole of Dar es Salaam, as it would have been prohibitively difficult to:

- Study their health-seeking behaviour within any context. In other words, the study would have lost the sense of spatially specific systemic characteristics that shape the behaviours and outcomes of the health care system. For example, sampling the households within the slum (squatter) area is different from sampling across the population of households some of which live in slum areas (scattered across the city). The study might have ended up with the same number of squatter households but with less control over the context.

- Integrate and triangulate the results of the household survey data with other quantitative and qualitative data collected in relation to other components of the system (health care facilities, municipalities and derived structures). This is because studying systemic behaviour requires triangulation of results. In other words, it takes looking at the same phenomenon from different angles to highlight different components of the system.

The choice of Kawe ward reflects a sampling balance; it is sufficiently wide to incorporate the poor, the middle and the rich (and to cover distinctive areas within which each of them reside), but it also remains sufficiently narrow to allow for integrating and triangulating the data along systemic lines. It thus presents a reasonably contained yet sufficiently diverse microcosm to investigate the research question.

### 3.3 Research Design and Purpose

The analysis of how the incidence of poverty shapes access to health care services requires understanding of key components in the operation of the health care market that is, demand and supply sides of the health care
market. The information from health care providers offers an understanding of the supply side of the health care market, while information from the household level brings in the understanding of the demand side of the market, specifically the component of health seeking behaviour, utilisation of health care services and its relation with poverty incidence. Given the expectation that the health care market does not operate efficiently because of market failure (See Section 2.1.1), this analysis explores information from the municipal authorities. This includes the regulatory and supervisory mechanisms in place to monitor the health care activities at this level. In this regard, this research project occurred at three distinct levels: household level, health care facilities and municipal level. The main purpose of each distinct level of the research design is as follows.

(I) Household level

Household level involves using a ward-level household survey and ethnographic methods to investigate the interrelationship between poverty, health seeking behaviour and utilisation of health services.

**Ethnography (narratives) of selected households:** About six households were selected to allow the construction of the narratives of health seeking behaviour prior to the core household survey. These narratives covered in detail a recent illness episode in the particular household and analysed their experience in seeking health care services. The key concern for the narrative interviews is to provide in depth understanding of health care financing, health care seeking behaviour and utilisation of health care services at the household level. The narrative interviews are also designed to capture any information left out in the household survey.

**Household survey:** Among others, the household survey aimed to obtain the following quantitative information through household questionnaires.

- Identification of household wealth indicators through using non-income (asset based) proxy indicators. This information proved useful in categorising the surveyed households into three wealth/poverty groups through the development of an asset index. In this phase, the researcher collected the following information: housing, quality and characteristics of dwelling and its infrastructure; ownership of consumer durables such as radio, television, refrigerator,
etc; and aspects of human capital that include nutrition and social capital (See Section 3.7).

- Household economic activities
- Household members’ individual characteristics (age, sex, marital status, education, relation to the head of household, etc)
- Illness episodes: track illness/injury episode(s) over a three-month period for each household member. The focus here was on health care seeking behaviour once the illness was identified; that is, curative care.
- Health seeking behaviour: what did they do for each illness episode?
- How do different households deal with different types of illnesses?
- Accessibility to health care facilities and level of treatment received.
- Health expenditure/cost involved in accessing health care services (for each illness episode) at different levels and from different health care providers. These may include formal charges, informal charges, transport cost, time, loss of income and others.
- Coping strategies in accessing decent health care services.
- Affordability of accessing available health care services including sources of funding.

Furthermore, at the household level qualitative information was obtained to cover the following key issues: elements of exclusion; experiences of abusive behaviour of health care workers towards patients; strengths and weakness of the existing exemption system; existing payment structure to finance health care services; and aspects of traditional and spiritual healers. It is important to note that this thesis captured some aspects of traditional/spiritual healing to gain understanding of the pattern of health care seeking behaviour, but this aspect receives limited treatment, as it is not a central element of this study.

**Multilayered structure of units of analysis:** The household survey adopted a multilayered structure of the units of analysis. This structure lays the foundation for the larger part of the results and therefore forms one of the major components in the process of investigating systemic behaviour and outcomes. The household survey adopted for this research goes beyond the level of households and individuals within them. The design of the household survey was for it to operate at different
units of analysis, some of which directly aim to analyse health care seeking behaviour. In this structure, the primary sampling unit is the household itself. However, the survey design went further to include different layers, which then nested the set of distinctive units of analysis the household, individuals, illness episodes and visits.

\[ \text{HH} \rightarrow \text{individual} \rightarrow \text{illness episodes} \rightarrow \text{visits} \]

Each layer is exhaustive with respect to the prior one. This means that all individuals within each household were surveyed, covering all illness episodes relating to all ill persons in the household (in the past three months) and all visits related to each episode. The advantage of this structure of completeness is that there was no need to construct additional multipliers for each successive layer since no further sampling was involved. For example, if the study had chosen to pick two individuals randomly within each household instead of picking all individuals, it would have to deal with another set of multipliers. Similarly, if it had sampled some episodes instead of taking all of them, it would have had to calculate multipliers for each episode. Thus, choosing this exhaustive design avoids such problems.

Furthermore the use of episodes as a unit of analysis (and thereafter recording all visits to health care providers for each episode) is an improvement compared to the data on health care collected for many health studies, including the 2001/2002 Tanzania Household Budget Survey (HBS). The 2001/2002 Tanzania HBS only collected information on whether a particular individual was ill in the past month, regardless of the number of episodes/visits by a particular individual. The information on utilisation of health care services collected in 2001/2002 Tanzania HBS did not base its information on a particular episode nor on the number of visits made for a particular illness. Therefore, information gathered on the pattern of utilisation of health care services from 2001/2002 Tanzania HBS remains unclear. As mentioned in the theoretical chapter, the use of ‘episodes’ as a unit of analysis is important, especially when dealing with utilisation of health care services as this notion can be closely associated with the conventional notion of demand.
(II) Level of health facilities

At this level, two sets of interviews took place: health care provider interviews and exit patient interviews as elaborated below.

**Health Care Provider Interviews:** The researcher enlisted a set of health care providers, including public and private (for profit and not for profit) providers at different levels, for semi-structured interviews. A sample of health care providers included in this exercise was based on the preliminary information obtained from the household survey. This was important to ensure that all-important sources of care as identified in the household survey, from within and outside the ward level, are included in the survey. Furthermore, the selected health care providers were also willing to participate in this exercise.

The main objective of interviewing the health care providers was to gain a better understanding of the influence of the supply side of the health care market on accessibility of health care services. Specifically, the main intention was to explore the following key aspects: quality and range of services provided; magnitude and quality of human resources for health; pricing practices; waivers, exemption and response to inability to pay; and the existing links between the health care providers amongst themselves and also with the municipal authority. For the selected health care facilities located in Kawe ward, it was also possible to take an ethnographic approach to the qualitative aspects of the fieldwork. The researcher observed the existing interactions between these facilities and local communities. These interactions were explored in a less structured context of more open follow up interviews with small numbers of selected households from the broader sample, and through diary-keeping by the researcher and research assistants.

**Exit patient interviews:** Exit patients were also interviewed from the selected health care facilities. In each of the health care facilities visited, the researcher randomly selected and then interviewed ten patients. The exit patient interviews used a structured questionnaire specifically designed to capture information regarding the utilisation of health care services. Therefore, the main objective of interviewing the exit patients was to obtain first hand information on health care services received by users, then to triangulate this information with the information received from the health care providers’ interviews and from the household level.

Specifically, the design of the exit patient interviews was to capture the following key issues: reasons for the demand of health care services;
determinants for the choice of health care facility; perception of quality of care received; aspects of self-medication and other sources of care before seeking health care services at the facility level. Other issues include cost involved and aspects of affordability in financing health care services; the prices of services provided; aspects of abuse of patients by health care providers; and the mechanism of exemption system(s) in place.

(III) Municipal level
At this level, the information came from Kinondoni municipality with the following intention:

- To analyse the pattern of health care services available (i.e. public, private and non-governmental health care providers) from the available data, in order to identify apparent gaps and understand the inter-relationship between public and private provisions.
- To analyse the regulatory mechanism that is in place in order to understand better the mechanism of provision and supervision of health care services at this level.
- To analyse the involvement of health care facilities (both public and private) in the municipal level planning process.

3.4 Data Collection and Analysis
This research collected both primary and secondary data. This section explains the data collection process and the mechanism for data analysis in detail.

3.4.1 Primary data
The main source of data and information for this study is the primary data collected at three different levels as it has been explained earlier—municipal level, health care facilities and household level. Three instruments were used to facilitate the primary data collection process, namely structured and semi-structured questionnaires, narrative (ethnography) interviews and participant observation methods. The primary data collection process took place from April to October 2006. This was after obtaining a research permit from the Kinondoni municipality to facilitate research activities within the municipality and specifically in Kawe ward (See Appendix I).
(I) Data Collection Instruments

Questionnaires: Three sets of questionnaires were developed for the purpose of this study.
(i) Household questionnaires designed to collect information at the household level.
(ii) Provider questionnaires designed for the health care facility interviews.
(iii) Exit patient questionnaires designed to collect information from patients exiting the sampled health care facilities (See Appendices II, III and IV). It is important to note that in designing these questionnaires some questions have been adopted from the questionnaires used for the Household Budget Survey 2001/01, Tanzania HIV/AIDS Indicator Survey 2003/2004, and the study on Managing and Regulating Mixed Health Care Systems in Tanzania 1999.

Narratives and participant observation methods: The narratives and participant observation methods were used to excavate more qualitative understanding of the accessibility of health care services and coping mechanisms through observation, and formal and informal discussions during the fieldwork.

Pilot study: The questionnaires used in this study were pre-tested in April 2006 in Kawe ward and feedback from this exercise was used to revise and finalise the questionnaires before proceeding to the main exercise. The pilot study covered a total of ten households, one lower level health care facility and three exit patient interviews. It was also during the pilot study that recruitment and training of three research assistants (RAs) was conducted, two of which were maintained during the entire survey. The RAs primarily assisted the researcher in conducting the household survey, exit patient interviews and in the data entry process. The RAs were recruited based on their academic qualifications and experience in conducting household surveys. The RAs received at least one week of training before commencing the actual fieldwork. The RAs received training in interviewing techniques and understanding the content of the questionnaire. The training exercise involved mock interviews, written tests and field practice.
(II) Magnitude of Primary Data Collected

(a) Household survey data: This exercise covered 300 households, 100 from each selected hamlet (Mlalakuwa, Ukwamani and Mzimuni). The household survey took place from May to September 2006 by using the household questionnaires. The period that the survey was conducted was carefully determined, taking into consideration the seasonal patterns of disease in Dar es Salaam. Later sections of this thesis cover how the sampling process arrived at the household selection.

Ethnographic research (qualitative component): The researcher conducted six narrative interviews in May 2006 to enhance the qualitative part of the research. The main aim was to explore information on health care seeking behaviour and utilisation of health care services for the most recent episodes that occurred to the selected individuals. Street-level executive officers helped with the selection of the six cases. Two narrative interviews were conducted in better-off households while the remaining four interviews were conducted in poor ‘squatter’ households. The narrative interviews considered the variation of illness episodes covered, including type of illness (chronic and non-chronic), age of the selected case (children, youth, old age) and gender. The experience and information obtained from this exercise was used to improve the household questionnaire further.

Definition of household: This section provides explanation on the definition of household as used in this research. The literature indicates that there is no uniformity in definitions of household across many studies and surveys. However, most definitions are concerned with living together and eating together and sometimes with pooling of funds by the household members (Deaton 1997: 23). Therefore, all household surveys are based on the definition of some kind of domestic group (ILO 1994; Grosh and Glewwe 1995; Caldwell 1985).

This research defines a household as a person or group of persons who are living together and share a common cooking pot of food. This group of people could be occupying part of or a whole building or not necessarily living in the same building (URT-TACAIDS 2005: 7). The household members will include the usual residents de jure including children under 18 who are away in school and de facto visitors and servants who have been part of the household for more than six months. This definition comes from the Tanzania HIV/AIDS Indicator Survey 2003/04 and is the working definition by the National Bureau of Statistics (NBS).
as it is broad enough to capture the set-up of most Tanzanian households.5

The household survey sought information regarding each member in a particular household. The main respondent was the head of the household and/or principal respondent or, best informed household member. The head of the household could be a woman or a man and in most cases is the one who reconciles the diverse interests of household members and manages the common household recourses.

(b) Health care providers and exit patient interviews: Fourteen health care provider interviews took place from the selected health care facilities at different levels (hospitals, health centres and dispensaries). The health care facilities covered for the provider interviews are from both public and private (including not for profit) sectors. The health care facilities covered are outlined thus.

- **Three hospitals**: one municipal public hospital, one private for profit hospital and one private not for profit hospital.
- **Two health centres**: One public health centre and one private health centre.6
- **Nine dispensaries**: Two public dispensaries, two private (not for profit) dispensaries, four private (for profit dispensaries) and one informal – private (not registered) dispensary.

In the selection of health care facilities, a two step approach was used. A sample of health care facilities was obtained from the preliminary analysis of the household survey that enabled the identification of all-important sources of care. Therefore, the sampling of health care facilities has not been restricted in Kawe ward but also includes facilities outside the ward that are important sources of care for Kawe residents.

**Exit patients**: 140 exit patient interviews were also conducted in the health care facilities visited. That is, in each health care facility visited, ten exit patients were interviewed.

(c) Municipal level information: Focus group discussions and one on one interviews were conducted with officials (at different levels) dealing with health care issues in Kinondoni municipality. To enhance understanding and easy access to the information required at this level, a close working relationship was established with the Municipal Health Research Coordinator (MHRC) and some members of the Municipal Health Man-
agement Team (MHMT). The interview guide was also used from time to time to guide these discussions.

3.4.2 Secondary data

The following methods were used to obtain secondary data and information.

Documentary review

Documentary review was used to collect the required information from published and unpublished documents. The key sources of information include the Ministry of Health (MoH), National Bureau of Statistics (NBS), Ministry of Finance (MoF), Presidents Office: Local Government and Regional Administration (PO:LGRA), International Organisations [e.g. The World Bank (WB), United Nations Development Programme (UNDP), European Union (EU), etc], other donor agencies that supports health activities, Kinondoni municipality, Kawe ward offices, socioeconomic development journals and other relevant publications.

Key Database


3.5 Data Management and Processing

Quantitative data

The quantitative data collected through the structured questionnaires (household, health care providers and exit patients) was entered and processed using Microsoft’s Excel. On each data set, a ‘data matrix’ was prepared to facilitate the organisation of data and the data entry process. The data sets were then analysed using STATA, one of the most convenient statistical packages for working with household survey data (Deaton 1997: 2). The data analysis drew particularly on methods of exploratory data analysis whereby comparison and analysis of the relationship between different variables occurs.
Qualitative Analysis NVivo

The qualitative data was analysed using NVivo software (formerly known as NUD*IST). This relatively user-friendly programme accommodates the widest range of research methods. NVivo software is ideal for research that involves multiple methods. It is also best when handling very rich text-based information, where deep levels of analysis are required on both small and large volumes of data.

3.6 Sampling Process for the Household Survey

This section outlines the sampling process used in the selection of the households covered in the survey. It also outlines the estimation procedures and the base of analysis by spatial location as used in this study.

About the households in Kawe ward

The 300 households covered in this study have been sampled out of the three selected administrative streets in Kawe ward. As has been mentioned in the previous section, Kawe ward is divided into six administrative streets/hamlets (Mzimuni, Ukwamani, Mbezi Juu, Changanyikeni, Makongo Juu and Mlalakua), which are further divided into ten-cell units (See Section 3.2).

3.6.1 Mixed multistage cluster sampling

The question of sampling always needs the context of what the research wants to generalise towards that is, the wider conclusions that the research intends to draw from the sample. In this study, the estimates of quantitative averages or proportions are derived to make comparisons within a systemic behaviour. This design involves mechanisms of social differentiation/discrimination; therefore the focus is not on overall averages (nor on general group-based averages), but on understanding differential behaviours/patterns that mirror themselves in quantitative/qualitative differences.

The sampling method adopted for the household survey was mixed multistage cluster sampling or, the purposeful selection of streets coupled with random selection of households using two-stage cluster sampling. Cluster sampling is always a multistage approach, because one always samples clusters first and then something else, either, further clusters or population units. In cluster sampling, the primary sampling unit
(the first stage of sampling procedure) is not the units of population sampled but groupings of those units referred to as clusters. In most cases, multistage cluster sampling entails stratification in which the stratification criteria for selection of clusters are always predefined (Bryman 2004: 93-4).

In this household survey, the mixed multistage cluster sampling process fell into three stages (See Figure 3.3). The first stage involved the purposeful sampling of the streets/hamlets in Kawe ward. The second stage involved the random sampling of ten-cell units from the selected streets/hamlets. The third stage involved the random selection of five households from each selected ten-cell unit. These three sampling stages are explained in detailed hereby below:

**First stage**

The first stage of the sampling process involved the identification of clusters (primary sampling units). In this stage, three streets out of the six in Kawe ward were purposely selected. This was mainly to avoid the exclusion of any streets wholly located within the squatter area.

Random selection might have also excluded the street with the strongest representation of better-off households and this would have
not made sense in terms of the objective of this research. Therefore, the	hree streets that were purposively selected are Ukwamani, Mzimuni and Makongo Juu.

Selection of **Ukwamani**, the first street was because it comprises a
large area of a poor community in a very densely populated, squatter
area. Therefore, most of the poor households were within this street.
This street/hamlet is also (informally) subdivided into five areas known
as Sakuveda, Ubwelani, Udoweni, Ukwamani and Kilimahewa. The sec-
ond street **Mzimuni**, lies along the coast and comprises a larger area of
low-density population, mostly occupied by a high-income group. How-
ever, Mzimuni also comprises a small area of high-density population
(squatter area) at the point where this street borders Ukwamani. Fur-
thermore, this street is subdivided informally into five areas Mzimuni
(squatter), Mjimpya (squatter), Mbezi beach (non-squatter), Mbezi Male-
cela (non-squatter) and Mbezi JK Nyerere (non-squatter). The third
street selected was **Mlalakua**. This comprises a medium density area.
The population from this area were mostly a medium level welfare
group. The purpose of the above selection was to spread the sample
across different socioeconomic groups covering different welfare levels.
This categorisation of households in the sample is useful for comparing
the health care seeking behaviour and utilisation of health care services
between households with different welfare levels.8

**Second stage**

The second stage of the sampling process involved random sampling of
the ten-cell units from the total number of available ten-cell units in each
of the selected streets. The researcher adopted random sampling at this
stage in order to arrive at meaningful summaries that could generalise
certain features of household behaviour as shaped by the systemic opera-
tion under study.

A total number of 20 ten-cell units were selected from each of the se-
lected streets using **circular systematic random sampling method**.9
This process involved listing all available ten-cell units in a respective
street. Then to obtain the **skipping number**, the researcher divided the
total number of available ten-cell units in a particular street by the re-
quired number of ten-cell units (20). A mixer box was used to randomly
select the initial starting point. Thereafter, the ten-cell units were system-
atically selected by skipping the number of ten-cell units on the list.
Third stage

The third stage of the sampling process involved the final sampling of the households covered in the survey. In this stage, five households were selected from each of the selected ten-cell units using circular systematic random sampling method. In this process, the list of all available households was determined in each selected ten-cell unit. The initial starting point of the selection was randomly determined and the skipping number was used to select the required number of households systematically. In this case, the skipping number was the ratio between all the available households in the particular ten-cell unit divided by the required number of households, five. Thus, 100 households were selected from the 20 ten-cell units sampled from each street, leading to 300 sampled households from the three streets.

Table 3.1
Number of sampled ten-cell units and households in the selected streets - Kawe ward

<table>
<thead>
<tr>
<th>Selected Street/Hamlet</th>
<th>Total Number of Ten Cell Units</th>
<th>Number of Sampled Ten Cell Units</th>
<th>Total Number of Households in the Sampled Ten Cell Units</th>
<th>Number of Households Selected in Each Sampled Ten Cell Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ukwamani</td>
<td>97</td>
<td>20</td>
<td>504</td>
<td>5 (5*20=100)</td>
</tr>
<tr>
<td>Mlalakuwa</td>
<td>63</td>
<td>20</td>
<td>365</td>
<td>5 (5*20=100)</td>
</tr>
<tr>
<td>Mzimuni</td>
<td>170</td>
<td>20</td>
<td>451</td>
<td>5 (5*20=100)</td>
</tr>
</tbody>
</table>

Source: Author Data

Table 3.1 provides summarised information on the sampling process on each selected street in Kawe ward as follows (See Appendix V for more detailed information):

Ukwamani street: Table 3.1 indicates that there are 97 ten-cell units in Ukwamani street. Twenty ten-cell units were selected randomly from the total number of ten-cell units. The sample includes the ten-cell units from all five subdivisions. In total, there are 504 households in the selected 20 ten-cell units. Five households came from each of the selected ten-cell unit that is, 100 households were sampled on this street.
**Mlalakuwa street:** Table 3.1 indicates that Mlalakuwa street has 63 ten-cell units. Twenty ten-cell units were selected out of these 63 ten-cell units. There are 365 households in the selected 20 ten-cell units. Five households were selected randomly in each selected ten-cell unit that is, 100 households were sampled on this street.

**Mzimuni street:** Table 3.1 indicates that Mzimuni street has 170 ten-cell units. Twenty ten-cell units were selected out of these 170 ten-cell units. In total, there are 451 households in the selected 20 ten-cell units. Five households were then selected at random in each ten-cell unit that is, 100 households were sampled on this street. However, for Mzimuni street, the list of available ten-cell units from the street administrative office was incomplete. The list they had comprised only those ten-cell units located in the squatter part of the street. The researcher had to rework the list by going to the field (with street administrative officers) to determine the available ten-cell units in the non-squatter part of the street. The implication of this was that the ten-cell list used for random selection was geographically ordered, starting out from the ten-cell units located in the squatter area followed by the ten-cell units from the non-squatter area. Therefore, the result of the random selection indicated that 1-10 ten-cell units were within the squatter area and ten-cell units 11-20 are in the non-squatter or, about half of the ten-cells units selected in this street are within and half outside the squatter area (and therefore are the households selected).

### 3.6.2 Estimation procedure

Random sampling implies that each member in a population should have an equal chance of inclusion in the sample. Simple random sampling assures that this is the case, provided of course that a complete frame list of all the units in the population is available. If such is the case, each observation carries equal weight. However, two stage cluster sampling adopted in this research poses a problem, since 20 clusters (ten-cells) were first selected out of the total number of ten-cells in each street and then an equal number of households (5 HH) were sampled within each ten-cell unit. Since ten-cell units differ in terms of the number of households belonging to them, the probability of a household’s inclusion in the sample will also differ depending on the cluster within which this household is situated. For example, choosing five households from a ten-cell unit with a total of 15 households gives a better chance for any
household selected than choosing five households out of a ten-cell unit with a total of 40 households. The latter five households (sampled from a sub-population of 40 households) represent a larger group than the former five (sampled from a sub-population of only 15 households). In other words, in calculation of summary measures, the sample of five households selected out of a total 40 households should receive higher weight than the five households selected out of 15 households. This explains the use of multipliers in household survey data.

The formula for the multiplier of various proportions and averages, street wise was calculated on the following basis:

\[
\text{Multiplier} = \frac{\text{(Total no of HHs in ten-cell t)}}{\text{(no of HHs sampled in ten-cell t)}} \cdot \frac{\text{(Total no of ten-cells)}}{\text{(no of ten-cells sampled)}}
\]

(Eq. 3.3)

Note that the denominator is the same for all ten-cells—that is, five households were sampled in each ten-cell—but the numerator differed depending on the number of households in each ten-cell unit. This ratio will be larger, therefore, the greater the number of households in the ten-cell unit (hence, the term ‘multiplier’).

This ratio is then multiplied once more with the following ratio:

\[
\frac{\text{(Total no of HHs in ten-cell t)}}{\text{(no of HHs sampled in ten-cell t)}}
\]

(Eq. 3.1)

The denominator is always 20, but the numerator will differ depending on the number of ten-cell units in each street. This ratio amplifies the results to street level.

The total multiplier is then the product of both these ratios, equations (3.1) and (3.2) above:

The multiplier ensures that households picked out of ten-cell units with a larger number of households are given more weight in the calculation of proportions or average relations than households picked from ten-cells with a smaller number of households. The use of multipliers compensates for the uneven chance in being picked for inclusion in the sample due to differences in the sub-populations in clusters. Furthermore, in the analysis of weighted data, the test for independence has
been performed using STATA ‘survey based’ command (svy) after specifying the survey design using the command (svyset) with selected streets as strata, ten-cell units as primary survey units and households as the secondary survey units.

3.7 Post-Fieldwork: Classification and Validation of Asset Based and Spatial Dimensions of Poverty

This study analyses poverty from two angles: the asset based and the spatial dimension of poverty. The analysis of poverty in these two dimensions is important because of the hypothesis that the location in which the individuals live and the assets they possess influences access to health care services in the current health care market. The asset-based approach mainly takes the individualistic concept and uses asset indicators to classify households into different welfare levels. On the other hand, spatial dimension takes into account the influence of location of the household in defining poverty. This is because there are substantial imbalances in provision of basic infrastructure between different localities. In this regard, Sections 3.7.1 to 3.7.3 below provide an explanation of the process of classification and validation of households by assets levels, whereas Sections 3.7.4 and 3.7.5 analyse and validate the spatial dimension of poverty as applied in this study.

3.7.1 Classification of Households by Asset Levels: Construction of an Asset Index

The households covered in the survey have been classified into three welfare levels by using an asset index. The construction of an asset index considers type of items included, weights for the various items used in the index and the degree of reliability and performance of the index. The simplest type of asset index is the one that provides all the selected assets equal weight regardless of their value and/or type (Ovensen 2006). The literature indicates that the use of asset index as a measure of household welfare level is widely preferred due to limitations and complexities associated with income measures. Moser and Felton (2007) reveal that income as a measure of wealth proved to have limitations in terms of measurement and accuracy and especially in developing countries. The main problems involve the seasonality of income, the problem in measuring the value of bartered goods and work done for oneself.
Furthermore, Moser and Felton (2007: 8) indicate that the basis for construction of an asset index is mainly on the following categories of assets: physical capital, financial/productive capital, human capital and social capital. Physical capital includes housing indicators (e.g. source of water, toilet facility, roof materials, source of energy, etc.) and ownership of consumer durables (e.g. television, refrigerator, iron, bicycle, car, etc.). Financial capital also includes the main source of income and having a bank account. Human capital includes two main components: education (e.g. illiterate level, primary schooling, secondary schooling, etc.) and health/nutrition (e.g., number of meals, days consumed meat, etc.). Social capital is also important in determining the welfare of the household and this includes aspects like ability of households to borrow in case of emergency.

3.7.2 Classification of households using the asset index

The households covered in this study divide into three poverty/asset levels: better-off households, middle level households and poorer households. The classification of these households has used a simple but robust asset index. The selected asset index is based on the Tanzanian context and uses asset variables identified /developed by the National Bureau of Statistics (NBS). In this regard, the following asset ownership guidelines have been followed:

- **Better-off households:** The household will fall into this group if it owns any of the following assets: car, truck, and/or motorcycle/scooter.
- **Middle level household:** The household will fall into this group if it owns any of the following assets: refrigerator, television or bank account.
- **Poorer households:** Do not own any of the above.

Table 3.2 shows the numbers of households for each category.

Once the asset index has been constructed, it is necessary to check its performance and reliability. This process ensures whether the assets index generates a clear division across the poor, the middle and the rich households (Ovensen 2006). The importance of checking the reliability of the asset index is to ensure that the index is internally coherent. This process also ensures that the asset index correlates with other welfare indicators included in the survey (See Section 3.7.3 below).
3.7.3 Coherence (validation) of the asset index

The classified households (by the asset index) were then cross tabulated with other categories of assets selected in each group (physical, financial, human and social capital) to see if there is strong correlation with them. The intention here was to check whether the asset index used produces a clear separation between poverty levels, i.e. it is internally coherent.

The results obtained indicate that the asset index used is reasonably coherent and makes sense as an indicator of wealth and poverty. The results also indicate great deprivation across all indicators for the poorer group. That is, the poor lagged behind on physical capital, ownership of consumer durables, human capital and financial capital (and the reverse for the better-off group). This explains a clear indication of inequality based on asset classification. The detailed results obtained for the selected indicators are as follows.

### (a) Association with physical capital (housing indicator)

The association between the classified households and the selected housing indicators indicates that the asset index is internally coherent. The pattern of the selected items shows (main source of lighting used in the household, quality and ownership of dwelling/houses) quite a substantive difference between the three welfare groups. This indicates coherence of the asset indicator used (See Tables 3.3 to 3.5).
Table 3.3 indicates that quality of housing differs widely for the poorer, the middle and the better-off households. All houses roofed with natural materials are from the poorer group, whereas the largest proportion of houses roofed with tile/concrete materials are from the better-off group. The houses for poorer and middle level groups also used rudimentary/corrugated iron as a main material for roofing.

Table 3.4 indicates that the ownership of dwelling varies by asset level. The majority of better-off households (84%) own their own dwelling, whereas this proportion is lower for the middle group (66%) and lowest for the poorer group (42%).

The pattern of the main source of lighting used by the households is also indicative of the sign of well being. All households from the better-off group (100%) and the majority of middle level households (88%) use electricity as their main source of lighting. However, the majority of poorer households (83%) use a paraffin lamp/candle as their main source of lighting (See Table 3.5).

### Table 3.3

<table>
<thead>
<tr>
<th>HH assets indicator</th>
<th>Natural</th>
<th>Rudiment</th>
<th>Corrugated</th>
<th>Tiled</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorer</td>
<td>44</td>
<td>1730</td>
<td>1403</td>
<td>0</td>
<td>3177</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>55</td>
<td>44</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Middle</td>
<td>0</td>
<td>1457</td>
<td>1366</td>
<td>13</td>
<td>2836</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>51</td>
<td>48</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Better</td>
<td>0</td>
<td>233</td>
<td>395</td>
<td>786</td>
<td>1415</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>17</td>
<td>28</td>
<td>56</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>44</td>
<td>3420</td>
<td>3164</td>
<td>800</td>
<td>7428</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>46</td>
<td>43</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic,Bold)
Number of observations = 300

Pearson:
Uncorrected chi2(6) = 151.4123
Design-based F(4.55, 259.30) = 18.0912 P = 0.0000

Source: Author’s Household Survey Data
Table 3.4
Ownership of dwelling by household poverty level

<table>
<thead>
<tr>
<th>Ownership of a dwelling</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorer</td>
<td>1339</td>
<td>1838</td>
<td>3177</td>
</tr>
<tr>
<td>Middle</td>
<td>1867</td>
<td>969</td>
<td>2836</td>
</tr>
<tr>
<td>Better</td>
<td>1193</td>
<td>222</td>
<td>1415</td>
</tr>
<tr>
<td>Total</td>
<td>4398</td>
<td>3029</td>
<td>7428</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300
Pearson:
Uncorrected $\chi^2(2) = 32.4594$
Design-based $F(1.99, 113.71) = 12.1974$  $P = 0.0000$

Source: Author’s Household Survey Data

Table 3.5
Main source of lighting by household poverty levels

<table>
<thead>
<tr>
<th>Main fuel source of lighting</th>
<th>Electric</th>
<th>Paraffin</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorer</td>
<td>525</td>
<td>2652</td>
<td>3177</td>
</tr>
<tr>
<td>Middle</td>
<td>2492</td>
<td>344</td>
<td>2836</td>
</tr>
<tr>
<td>Better</td>
<td>1415</td>
<td>0</td>
<td>1415</td>
</tr>
<tr>
<td>Total</td>
<td>4432</td>
<td>2995</td>
<td>7428</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300
Pearson:
Uncorrected $\chi^2(2) = 175.7444$
Design-based $F(2.00, 113.93) = 66.2175$  $P = 0.0000$

Source: Author’s Household Survey Data
(b) Association with ownership of consumer durables

The association between the classified households and the selected indicators on the ownership of consumer durables indicates that the index is internally coherent (See Tables 3.6 and 3.7). The ownership of consumer durable items varies by asset level. Table 3.6 indicates that the majority of better-off households (98%) own an iron (electrical/charcoal iron as it has been used in this study). However, this proportion is lower for the middle group (71%) and very low for the poorer group (18%).

Table 3.6
Ownership of an iron by poverty level

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Own Iron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorer</td>
<td>583</td>
</tr>
<tr>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Middle</td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Better</td>
<td>1392</td>
</tr>
<tr>
<td></td>
<td>98</td>
</tr>
<tr>
<td>Total</td>
<td>3989</td>
</tr>
<tr>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Number of observations = 300 (Italic, Bold)

Pearson:
Uncorrected $\chi^2(2) = 124.0484$
Design-based $F(1.76, 100.44) = 41.5724$ P = 0.0000

Source: Author’s Household Survey Data

Table 3.7 indicates that owning a refrigerator is also a sign of well being. There is significant variation between different household levels. Almost all households from the better-off group (99%) own a refrigerator whereas none of the households from the poorer group owns one. The middle group shows an average trend (56% of households own a refrigerator).
Table 3.7
Ownership of refrigerator by poverty level

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Own a refrigerator</th>
</tr>
</thead>
<tbody>
<tr>
<td>indicator</td>
<td>Yes</td>
</tr>
<tr>
<td>-----------</td>
<td>--------</td>
</tr>
<tr>
<td>Poorer</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
<tr>
<td>Middle</td>
<td>1586</td>
</tr>
<tr>
<td></td>
<td>56</td>
</tr>
<tr>
<td>Better</td>
<td>1395</td>
</tr>
<tr>
<td></td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td>2981</td>
</tr>
<tr>
<td></td>
<td>40</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300
Pearson:
Uncorrected $\chi^2(2) = 179.2367$
Design-based $F(1.44, 81.89) = 90.9592$ P = 0.0000

Source: Author’s Household Survey Data

(c) Association with food and nutrition

The association between the classified households and the selected human capital variables also indicates that the index is internally coherent (See Tables 3.8 and 3.9). There is distinct variation on the selected food and nutrition variables by household welfare levels. Table 3.8 reveals that the number of meals a day per household differs substantially across the households’ assets levels. All of the better-off households can afford three meals a day. However this rate is lower for the middle group (71%) and only about half (56%) of the poorer group can afford three meals a day.

Table 3.9 indicates existing inequality concerning the problems facing households in satisfying food needs. The better-off households seem quite steady in satisfying food needs for their households. The majority of households from this group have never experienced food problems (91%) and only a few (9%) seldom experienced some problems. However, the position is quite different for the poorer households; it is com-
mon for them to experience food problems in their households (at different levels). About 46 per cent of households from the poorer group are always/often experiencing problems in satisfying the food needs for their households. This rate is slightly lower for middle level households where about 21 per cent of households always/often experience problems in satisfying the food needs for their households. Comparatively to the better-off households, the proportion of households who never had problems in satisfying food needs is lower for the poorer and middle level households with only 12 per cent for the poorer and 29 per cent for the middle level households.

**Table 3.8**

*Number of meals a day by household poverty level*

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Number of meals a day</th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poorer</td>
<td>65</td>
<td>1319</td>
<td>1793</td>
<td>3177</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>42</td>
<td>56</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>0</td>
<td>813</td>
<td>2023</td>
<td>2836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>29</td>
<td>71</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>0</td>
<td>0</td>
<td>1415</td>
<td>1415</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>2132</td>
<td>5231</td>
<td>7428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>29</td>
<td>70</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300

Pearson:
Uncorrected $\chi^2(4) = 37.8977$
Design-based $P(3.16, 180.18) = 5.9368$ $P = 0.0005$

Source: Author’s Household Survey Data
Table 3.9

Problems in satisfying household food needs (last year)

<table>
<thead>
<tr>
<th>Household</th>
<th>Problems: satisfying food needs, in the last year</th>
<th>HH assets indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poorer</td>
<td>Middle</td>
</tr>
<tr>
<td>Never</td>
<td>366</td>
<td>819</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>Seldom</td>
<td>353</td>
<td>741</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>26</td>
</tr>
<tr>
<td>Sometime</td>
<td>1003</td>
<td>669</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>24</td>
</tr>
<tr>
<td>Often</td>
<td>753</td>
<td>348</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td>Always</td>
<td>701</td>
<td>260</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>3177</td>
<td>2836</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observations = 300

Pearson:
Uncorrected chi²(8) = 135.5488
Design-based F(5.27, 300.63) = 10.2000 P = 0.0000

Source: Author’s Household Survey Data

(d) Social and financial capital

The association between the classified households and the selected variables for social and financial capital also indicates that the index is internally coherent (See Tables 3.10 and 3.11). The pattern in Table 3.10 reveals that owning a bank account is indicative of being well off. Table 3.10 indicates that none of the poorer households have a bank account and only about one third (36%) of the middle level households have a bank account. However, the situation is different for the better-off group, where the majority (90%) have a bank account.
### Table 3.10
Ownership of bank account by poverty level

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Have a bank account indicator</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorer</td>
<td>0</td>
<td>3177</td>
<td>3177</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>1033</td>
<td>1803</td>
<td>2836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>64</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>1271</td>
<td>144</td>
<td>1415</td>
<td></td>
</tr>
<tr>
<td></td>
<td>90</td>
<td>10</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2304</td>
<td>5124</td>
<td>7428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>69</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300

Pearson:
Uncorrected $\chi^2(2) = 151.6381$
Design-based $F(1.99, 113.33) = 50.1456$ $P = 0.0000$

Source: Author’s Household Survey Data

### Table 3.11
Ability to borrow in case of emergency by poverty level

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Ability to borrow in case of emergency indicator</th>
<th>Yes</th>
<th>No</th>
<th>I don't Know</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poorer</td>
<td>964</td>
<td>2129</td>
<td>84</td>
<td>3177</td>
<td></td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>67</td>
<td>3</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Middle</td>
<td>1078</td>
<td>1466</td>
<td>292</td>
<td>2836</td>
<td></td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>52</td>
<td>10</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Better</td>
<td>1161</td>
<td>201</td>
<td>53</td>
<td>1415</td>
<td></td>
</tr>
<tr>
<td></td>
<td>82</td>
<td>14</td>
<td>4</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3202</td>
<td>3796</td>
<td>429</td>
<td>7428</td>
<td></td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>51</td>
<td>6</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observations = 300

Pearson:
Uncorrected $\chi^2(4) = 53.9128$
Design-based $F(3.47, 197.95) = 12.8486$ $P = 0.0000$

Source: Author’s Household Survey Data
Furthermore, concerning the ability to borrow money in case of emergency the results also show distinct variation. Table 3.11 indicates that the majority of better-off households (82%) have the ability to borrow in case of emergency. However, the trend is lower for poorer and middle level households: 30 per cent and 38 per cent respectively.

3.7.4 Spatial dimension of poverty

The analysis by spatial location was conducted through separation of households in the squatter and non-squatter areas. This development was formulated at a later stage, when it became clear that Mzimuni street incorporated a part that de facto belongs to the squatter area (although it falls under a different administrative unit; street). Therefore, the households in Mzimuni were easily broken down into Mzimuni [1] to represent households belonging to the squatter area and Mzimuni [2] to represent the households belonging exclusively to the better-off area. In this way, the analysis base for spatial location is as follows: Mzimuni [1] (squatter), Ukwamani (squatter), Mlalakuwa (middle density), Mzimuni [2] (non-squatter).

This arrangement made it possible to avoid the problem of deriving summaries (estimation procedure) that would otherwise arise if all households belonging to the squatter area were joined together to form a combined squatter variable (Mzimuni [1] and Ukwamani). This is because the combined (squatter) variable cuts across the two streets, which have different weights. This problem springs from the fact that the original design used streets as purposively chosen clusters (See Section 3.6.1).

This arrangement made it possible to make statistically meaningful comparisons of averages and proportions by spatial location. It has also made it possible to use the derived weights (See Section 3.6.3) and allowed for meaningful comparisons across the squatter/non-squatter divide (across the three streets) without requiring the derivation of Kawe-based averages. Table 3.12 shows the cross-tabulation of the ordinary street variable (Mzimuni, Ukwamani, and Mlalakua) with the new street variable that takes into consideration the spatial dimension, splitting Mzimuni into two halves. This cross-tabulation is done with svy weights and, hence, provides the estimated number of households in the three streets respectively including the divided Mzimuni street (See Section 3.6.3).
3.7.5 Validation of spatial differentiation and access to infrastructure: Where are the poor located?

In an urban setting, there is a close association between availability of basic infrastructure, spatial location and the distribution of the poor (Dymski 2004; Harpham and Tanner 1995). This section validates that relationship by using the spatial variables explained in Section 3.7.4 and using household asset index that enabled the division of the households surveyed into three poverty levels, namely poorer, middle and better-off (See Sections 3.7.2 and 3.7.3).

**Distribution of the poor by spatial location**

There is a close relationship between distribution of the poor and the spatial location. Table 3.13 indicates that the majority (80%) of poor households covered in the survey are located in the squatter area in Ukwamani and Mzimuni[1]. Contrary to this, a majority of the better-off households are located in the non-squatter area. The data shows that 89 per cent of better-off households covered in the survey are located in the non-squatter area (Mlalakuwa and Mzimuni[2]) and only a few (11%) are located in the squatter area. Furthermore, the distribution of the middle level households is also leaning more towards the squatter area (See Table 3.13).

![Table 3.12](image-url)

**Table 3.12**

*Estimated number of households by spatial location*

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mzimuni[1]</td>
<td>2329</td>
<td>0</td>
<td>0</td>
<td>1504</td>
<td>3833</td>
</tr>
<tr>
<td>Ukwamani</td>
<td>0</td>
<td>2444</td>
<td>0</td>
<td>0</td>
<td>2444</td>
</tr>
<tr>
<td>Mlalakua</td>
<td>0</td>
<td>0</td>
<td>1150</td>
<td>0</td>
<td>1150</td>
</tr>
<tr>
<td>Total</td>
<td>2329</td>
<td>2444</td>
<td>1150</td>
<td>1504</td>
<td>7428</td>
</tr>
</tbody>
</table>

Key: weighted counts

Source: Author’s Household Survey Data
Table 3.13
Distribution of the poor by spatial location

<table>
<thead>
<tr>
<th>Street</th>
<th>Poorer</th>
<th>Middle</th>
<th>Better</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mzimuni[1]</td>
<td>1329</td>
<td>974</td>
<td>26</td>
<td>2329</td>
</tr>
<tr>
<td>Ukwamani</td>
<td>1222</td>
<td>1092</td>
<td>130</td>
<td>2444</td>
</tr>
<tr>
<td>Mlalakua</td>
<td>343</td>
<td>629</td>
<td>176</td>
<td>1150</td>
</tr>
<tr>
<td>Total</td>
<td>3177</td>
<td>2836</td>
<td>1415</td>
<td>7428</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observations  = 300

Pearson:
Uncorrected chi2(6)  = 148.6376
Design-based F(4.15, 236.71) = 15.5775   P = 0.0000

Source: Author’s Household Survey Data

Accessibility of infrastructure and spatial location

The results of this study indicate that, in terms of access to basic infrastructure, the households located in the squatter area are more disadvantaged compared to those households located in non-squatter areas. This problem of unbalanced distribution of basic infrastructure in the squatter location has indirect impact on the welfare (including health status) of the mainly poorer residents of this area. Among others, the data indicates that households in the squatter area are deprived access to the following basic infrastructure: reliable and safe water supply, good sanitation facilities, good housing conditions and electricity.

Table 3.14 indicates that households located in non-squatter areas have better access to improved and modern toilet facilities compared to households in the squatter areas. For example, Table 3.14 indicates that about 86 per cent of flush toilets are available in the non-squatter area that is, only 14 per cent of households in squatter area have access to flush toilets. The households in the squatter area depend mostly on a traditional pit latrine. The data indicates that traditional pit latrines are used by 76 per cent of households in the squatter area.
Furthermore, the pattern of access to reliable and safe water differs by spatial location. Table 3.15 indicates that the majority of households located in non-squatter areas have access to piped water inside their residences as compared to the households in the squatter area. The better-off households also manage to have an additional water supply by having water wells inside their residences. Table 3.15 indicates that all water wells inside the residences are located in better-off households. However, in squatter areas, the majority of households depend on water supplied by water vendors. Observations from the fieldwork indicate that the safety of water supplied by water vendors in the squatter area is always in doubt, as the source of this water is unclear.

There is also the problem of housing conditions for residents in the squatter area. Observations from the fieldwork indicate that houses in this area are congested and most of them are constructed using low quality material as compared to the houses in non-squatter area. For example, Table 3.16 indicates that majority of houses in the squatter area used low quality material for the floor. However, houses in the non-squatter

<table>
<thead>
<tr>
<th>Street</th>
<th>Toilet facility</th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flush</td>
<td>Improved</td>
<td>Traditional</td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------</td>
<td>----------</td>
<td>-------------</td>
<td>-------</td>
</tr>
<tr>
<td>Mzimuni[1]</td>
<td>126</td>
<td>1515</td>
<td>689</td>
<td>2329</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>39</td>
<td>35</td>
<td>31</td>
</tr>
<tr>
<td>Ukwamani</td>
<td>92</td>
<td>1538</td>
<td>814</td>
<td>2444</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>40</td>
<td>41</td>
<td>33</td>
</tr>
<tr>
<td>Mlalakua</td>
<td>252</td>
<td>633</td>
<td>265</td>
<td>1150</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>16</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>70</td>
<td>5</td>
<td>11</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td>1558</td>
<td>3894</td>
<td>1976</td>
<td>7428</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observations = 300

Pearson:
Uncorrected chi2(6) = 129.3817
Design-based F(4.44, 253.18) = 15.3650  P = 0.0000

Source: Author’s Household Survey Data
area used mostly high quality material for the floor: tile, ceramic and timber.

### Table 3.15
Main sources of water by spatial location

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Piped In</td>
<td>311</td>
<td>252</td>
<td>360</td>
<td>1011</td>
<td>1935</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>13</td>
<td>19</td>
<td>52</td>
<td>100</td>
</tr>
<tr>
<td>Piped Out</td>
<td>770</td>
<td>819</td>
<td>493</td>
<td>343</td>
<td>2425</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>34</td>
<td>20</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>Publ. tap</td>
<td>248</td>
<td>0</td>
<td>24</td>
<td>0</td>
<td>272</td>
</tr>
<tr>
<td></td>
<td>91</td>
<td>0</td>
<td>9</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Well Insid</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>41</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Public Wel</td>
<td>19</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Vendors</td>
<td>981</td>
<td>1374</td>
<td>273</td>
<td>109</td>
<td>2736</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>50</td>
<td>10</td>
<td>4</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2329</td>
<td>2444</td>
<td>1150</td>
<td>1504</td>
<td>7428</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>33</td>
<td>15</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 300

The data from the household survey also indicates unequal access to electricity for households located in different spatial locations. Table 3.17 indicates that households located in non-squatter areas have better access to electricity than households in the squatter area do. The problem of access to electricity for households located in the squatter area links to inadequate infrastructure to supply electricity to these areas, as well as to the problem of affordability faced by majority of poorer households to connect to the electrical supply services.
### Table 3.16

**Housing: Main material used in the floor**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mud/Clay</td>
<td>418</td>
<td>275</td>
<td>16</td>
<td>17</td>
<td>727</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>38</td>
<td>2</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>Cement</td>
<td>1911</td>
<td>2138</td>
<td>1026</td>
<td>536</td>
<td>5610</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>38</td>
<td>18</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Tile/wood</td>
<td>0</td>
<td>31</td>
<td>107</td>
<td>952</td>
<td>1090</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>3</td>
<td>10</td>
<td>87</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>2329</td>
<td>2444</td>
<td>1150</td>
<td>1504</td>
<td>7428</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>33</td>
<td>15</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 300  

Pearson:  
Uncorrected chi2(6) = 155.5830  
Design-based F(3.62, 206.39) = 21.8103, P = 0.0000

### Table 3.17

**Access to electricity by spatial location**

<table>
<thead>
<tr>
<th>Street</th>
<th>Access to electricity</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>----------</td>
<td>-----------------------</td>
<td>-----</td>
<td>----</td>
<td>-------</td>
</tr>
<tr>
<td>Mzimuni[1]</td>
<td>901</td>
<td>1428</td>
<td>2329</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>39</td>
<td>61</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Ukwamani</td>
<td>1443</td>
<td>1001</td>
<td>2444</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>59</td>
<td>41</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Mlalakua</td>
<td>935</td>
<td>215</td>
<td>1150</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>81</td>
<td>19</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Mzimuni[2]</td>
<td>1270</td>
<td>235</td>
<td>1504</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>84</td>
<td>16</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4549</td>
<td>2878</td>
<td>7428</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>61</td>
<td>39</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 300  

Pearson:  

Source for Tables 3.16 and 3.17: Author’s Household Survey Data
Unequal distribution of health care facilities by spatial location

During the household survey and health care provider interviews, it became clear that there is an unequal distribution of health care facilities, especially at higher levels (hospitals and health centres) between the squatter and non-squatter areas. Observations show that the squatter area does not have any public or private higher and/or middle level health care facilities. The only health care facilities available in the squatter area were a number of lower level private dispensaries plus one public dispensary.

Overall, there are fewer public health care facilities in Kinondoni municipality than private ones (See Table 3.18). For example, in the whole of Kinondoni municipality, there are 24 public dispensaries (only one in Kawe ward) and about 149 private dispensaries. Furthermore, there are only two public health centres and one public hospital, all located far from Kawe ward. Information regarding the precise number and location of health care facilities, especially private facilities, is limited. The above is the only data available regarding the number of health care facilities in Kinondoni municipality. The exact information on available private facilities by location could not be obtained as the municipal authority does not have enough labour to follow-up on changes in private health care provisions for example, closing down of facilities and change of location (See Chapter 7, Section 7.2). The available list was not up to date at the time of the interview with the municipal officials.

<table>
<thead>
<tr>
<th>Type of Health Care Facility</th>
<th>Public Sector</th>
<th>Private Sector</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>1</td>
<td>13</td>
<td>14</td>
</tr>
<tr>
<td>Health Centres</td>
<td>2</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Dispensary</td>
<td>24</td>
<td>149</td>
<td>173</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>168</td>
<td>195</td>
</tr>
</tbody>
</table>

Source: MMOH Kinondoni Municipal 2006
Notes

1 Kinondoni municipality has 27 administrative wards.

2 The Tanganyika Packers Factory has been closed for more than 15 years and is in the final stage of being privatised to a foreign investor.

3 Experience from the fieldwork indicated that the ten-cell units usually vary in number and in most cases they comprise more than ten households per unit.

4 The Tanzania Commission for AIDS (TACAIDS) initiated this survey executed by the National Bureau of Statistics (NBS) with technical assistance from MEASURE DHS - programme, a project sponsored by the United States Agency for International Development (USAID).

5 People may belong to one household in a rural area and another in an urban area (i.e. food sharing can take place within a group that does not share income). Therefore a ‘household is thus a concept, a rough approximation of reality, not a unit that we can always clearly identify on the grounds’. Adopted from ESRF/REPOA/ISS Postgraduate diploma in Poverty Analysis: Module One Conceptualising Poverty; Unit 4 How Gender Works: Gender and Market Divide, p. 6.

6 There are very few health centres in Kinondoni municipality (i.e. only eight out of 195 health care facilities in the whole municipality) and out of these only two are public owned. Private not for profit health centres are not available in Kinondoni municipality (MMOH 2006).

7 Clusters are the groupings or aggregation of population units.

8 The mechanism of categorising the sampled households by welfare levels is explained in subsequent sections.

9 The data on the number of available ten-cell units in each street came from a list recorded in the street administrative offices. However, for the case of Mzimuni street, the list available was incomplete therefore the researcher had to rework the list.

10 The indicator used in this study developed based on consultations made with NBS. NBS has already developed steps of classifying households by poverty level using asset variables. The indicators used in this study have been slightly modified to fit the urban context.
4.1 Introduction

This chapter analyses the impact of spatial and asset based differentiation on the pattern of health seeking behaviour and utilisation of health care services. Different spatial locations have diverse availability of key infrastructure and wealth level and this affects the way in which health care markets work in these locations. In this case, with identification of the link between poverty, spatial locality and access to health care service. This chapter uses the household data to analyse these differences and to determine whether the health care market works inclusively or exclusively towards access of health care services by the poor. The poor have been defined using their asset based characteristics and their spatial location (See Chapter 3, Section 3.7).

Figure 4.1
Causal Model: Spatial location, livelihood assets and access to health care services

Source: Author
This chapter provides a foundation for the analysis of the segmentation hypothesis addressed in this thesis. It questions whether where you live and what you possess matters in accessing decent health care services. The chapter draws its analytical distinctions from the theory chapter by looking at the relationship between poverty, spatial location, health care seeking behaviour (HSB) and access to health care services (See Chapter 2, Section 2.8). This chapter therefore uses the causal model in Figure 4.1 to look at the impact of spatial location and possession of livelihood assets on health care seeking behaviour and hence on access to health care services.

Dymski (2004) indicates that there is a close relationship between poverty and spatial location, which is mainly due to diversified structural characteristics between spatially differentiated communities. The causal model adopted as the base of analysis in this chapter (Figure 4.1) argues that structural disparities between spatial locations have a correlation with the possession of livelihood assets of people in these communities and that both factors bring about diversified health care seeking behaviour and utilisation of health care services in the commercialised health care system. The majority of people who live in high density/squatter areas possess similar wealth characteristics and also low level of economic activities (Dymski 2004; Harpham and Tanner 1995). Furthermore, the structural disparity between spatial locations is associated with differences in availability and quality of basic infrastructure including provision of health care services (See Chapter 3, Sections 3.7.4 and 3.7.5). This situation has a direct impact on health seeking behaviour and hence utilisation of health services between people coming from different spatial locations. The imbalance in availability of basic infrastructure also has an influence on the pattern of diseases, therefore making communities living in deprived areas more susceptible to communicable diseases (Harpham and Tanner 1995).

**4.2 Distribution of Illness Episodes by Poverty, Spatial Location and Population Characteristics: Who was Ill?**

This section analyses the pattern of distribution of illness episodes in relation to poverty, spatial location and includes some aspects of population characteristics. This analysis is useful in understanding the characteristics of the individuals who were ill as identified in the household survey. The information in Table 4.1 reveals that about one-third (35%)
of the individuals covered in the household survey were reported to be sick/injured in the past three months. Table 4.1 reveals that, when comparing the number of individuals who were ill/injured by welfare levels, the poorer group is observed to have slightly more members as compared to the other groups. However, the results of the chi-square test do not warrant the conclusion that the null-hypothesis of statistical independence can be rejected. Whether or not a person was ill/injured during the period concerned does not vary much between households with different poverty levels, this might be due to different perceptions of illness and health seeking behaviours, between households with different poverty levels.

Table 4.1

<table>
<thead>
<tr>
<th>HH assets indicator</th>
<th>Ill/Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Poorer</td>
<td>6130</td>
</tr>
<tr>
<td></td>
<td>38</td>
</tr>
<tr>
<td>Middle</td>
<td>5063</td>
</tr>
<tr>
<td></td>
<td>34</td>
</tr>
<tr>
<td>Better</td>
<td>2325</td>
</tr>
<tr>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>13519</td>
</tr>
<tr>
<td></td>
<td>35</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observation = 1537
Pearson:
Uncorrected chi2(2) = 4.7677
Design-based F(1.85, 105.46) = 1.2532, P = 0.2881

Source: Author’s Household Survey Data

As was indicated in the methodology chapter, the household survey had multi-layered structural units of analysis. That is, the household survey covered all illness episodes related to all reported ill people in the household in the past three months (See Chapter 3, Methodology, Section 3.3). In total, there were 733 illness episodes recorded from all the 538 ill/injured household members in the past three months. The total
number of illness episodes derives from the summation of the number of illness episodes that occurred for each individual who was ill/injured in the past three months. This is essential because some of the ill/injured household members had more than one illness episode within the surveyed three-month period. The use of episodes as a base of analysis is important in defining utilisation, and therefore associating it with the conventional notion of demand (See Chapter 2, Theory, Section 2.2.2).

This study also found that the number of illness episodes for the individuals from poorer households were higher as compared to the individuals from other welfare levels. Table 4.2 indicates that 21 per cent of the individuals from poorer households who were ill had more than one illness episode within the three-month period. This rate is higher than the 12 and nine per cent in the middle and better-off households respectively. These differences however, as the test shows, do not warrant the rejection of the null-hypothesis of statistical independence between the two variables.

<table>
<thead>
<tr>
<th>HH assets indicator</th>
<th>Number of episodes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Poorer</td>
<td>4808</td>
</tr>
<tr>
<td></td>
<td>78</td>
</tr>
<tr>
<td>Middle</td>
<td>4441</td>
</tr>
<tr>
<td></td>
<td>88</td>
</tr>
<tr>
<td>Better</td>
<td>2111</td>
</tr>
<tr>
<td></td>
<td>91</td>
</tr>
<tr>
<td>Total</td>
<td>11360</td>
</tr>
<tr>
<td></td>
<td>84</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Row percentages (Italic, Bold)
Number of observation = 538

Pearson:
Uncorrected chi2(4) = 11.3419
Design-based F(3.54, 201.68) = 1.3976    P = 0.2403

Source: Author’s Household Survey Data
Distribution of illness episodes by spatial location, gender and age

The overall pattern of distribution of illness episodes by spatial location reveals that more illness episodes occurred in squatter areas (68%) than in non-squatter areas affecting the poorer group more. However, the most striking observation on the pattern of distribution of illness episodes (by spatial and age groups) is the fact that most of the illness episodes that occurred in children under five years old were for children from the squatter area. Table 4.3 shows the higher proportion of illness episodes for children under five were from the squatter areas (Mzimuni [1] and Ukwamani) as compared to the remaining non-squatter areas (Mlalakua and Mzimuni [2]). The high incidence of under five episodes in the squatter areas can be closely linked to the area’s poor infrastructure (including a lack of safe water and sanitation facilities) together with the influence of poverty (e.g. in accessing adequate nutritional requirements) that can make these children more susceptible to getting sick (See

Table 4.3
Distribution of episodes by age and spatial location

<table>
<thead>
<tr>
<th>Street</th>
<th>Under 5</th>
<th>5-17 yrs</th>
<th>Adults</th>
<th>Elderly 60+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mzimuni1</td>
<td>1513</td>
<td>974</td>
<td>3873</td>
<td>398</td>
<td>6757</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>25</td>
<td>38</td>
<td>24</td>
<td>35</td>
</tr>
<tr>
<td>Ukwamani</td>
<td>1276</td>
<td>1396</td>
<td>3388</td>
<td>390</td>
<td>6450</td>
</tr>
<tr>
<td></td>
<td>36</td>
<td>36</td>
<td>33</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>Mlalakua</td>
<td>437</td>
<td>590</td>
<td>1402</td>
<td>232</td>
<td>2660</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>15</td>
<td>14</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Mzimuni2</td>
<td>272</td>
<td>923</td>
<td>1618</td>
<td>661</td>
<td>3475</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>24</td>
<td>16</td>
<td>39</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>3497</td>
<td>3883</td>
<td>10281</td>
<td>1682</td>
<td>19342</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observation = 733

Pearson:
Uncorrected chi2(9) = 40.6044
Design-based F(5.52, 314.40) = 2.6089 \( P = 0.0208 \)

Source: Author’s Household Survey Data
Chapter 7, Section 7.4). Proportionally, in the population sample there are more children under five in the squatter areas as compared to non-squatter areas.¹

The distribution of illness episodes by gender and age groups depicts a similar pattern for all age groups with exception of the adult age group, between 18 and 59. Table 4.4 reveals that female adults have more illness episodes than male adults do.² Not surprisingly, then the results of the chi square test for the table as a whole do not warrant the conclusion that the null-hypothesis of the statistical independence can be rejected. It is nevertheless interesting to note, that 62 per cent of illness episodes for the adults age group were from the female group. The higher pattern of illness episodes for female adults can be associated with reproductive medical conditions that affect females of this age group (TDHS 2004/05).

**Table 4.4**

_Distribution of episodes by gender and age group_

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under five</td>
<td>1654</td>
<td>1843</td>
<td>3497</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>53</td>
<td>100</td>
</tr>
<tr>
<td>5-17 yrs</td>
<td>2010</td>
<td>1872</td>
<td>3883</td>
</tr>
<tr>
<td></td>
<td>52</td>
<td>48</td>
<td>100</td>
</tr>
<tr>
<td>Adults</td>
<td>3957</td>
<td>6324</td>
<td>10281</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>62</td>
<td>100</td>
</tr>
<tr>
<td>Elderly60+</td>
<td>698</td>
<td>983</td>
<td>1682</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>58</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>8319</td>
<td>11023</td>
<td>19342</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>57</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (italic, Bold)  
Number of observations = 733

Pearson:  
Uncorrected $\chi^2(3) = 8.9219$  
Design-based $F(2.72, 154.79) = 1.7592$  
$P = 0.1625$

Source: Author’s Household Survey Data
Table 4.5

Frequency distribution of types of self-reported illness episodes

<table>
<thead>
<tr>
<th>Description of Illness</th>
<th>count</th>
<th>column %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria /fever</td>
<td>10238</td>
<td>53</td>
</tr>
<tr>
<td>Diarrhoea</td>
<td>1209</td>
<td>6</td>
</tr>
<tr>
<td>Accident</td>
<td>391</td>
<td>2</td>
</tr>
<tr>
<td>Dental</td>
<td>286</td>
<td>1</td>
</tr>
<tr>
<td>Skin/ENT</td>
<td>3046</td>
<td>16</td>
</tr>
<tr>
<td>Respiration</td>
<td>142</td>
<td>1</td>
</tr>
<tr>
<td>Hernia</td>
<td>138</td>
<td>1</td>
</tr>
<tr>
<td>Caesarean</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Heart Problem</td>
<td>321</td>
<td>2</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>102</td>
<td>1</td>
</tr>
<tr>
<td>Diabetes</td>
<td>460</td>
<td>2</td>
</tr>
<tr>
<td>Other Ill</td>
<td>947</td>
<td>5</td>
</tr>
<tr>
<td>Other Chronic</td>
<td>2043</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>19342</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Count = weighted counts
Column = column percentages (Italic, bold)
Number of observations = 733

Source: Author’s Household Survey Data

Types of illness episodes: What illnesses are they suffering from?

Malaria/fever is the primary illness that affects individuals in the surveyed area. Table 4.5 reveals that more than half of all self-reported illness episodes (53%) were due to malaria/fever problems. However, the incidence of malaria/fever illness was higher in the squatter areas than the non-squatter areas. Table 4.6 indicates that 59 per cent of all malaria/fever episodes were from individuals residing in squatter areas (Mzimuni[1] and Ukwamani) as compared to only 31 per cent of malaria/fever episodes self-reported in non-squatter areas (Mlalakua and Mzimuni[2]). The next largest set of problems affecting individuals in the surveyed area are skin and ear, nose and throat (ENT) problems. These problems occupied 16 per cent of all self-reported illness episodes and Ukwamani street (squatter) is observed to be highly affected by this problem (See Tables 4.5 and 4.6). During fieldwork, the researcher observed that the houses on Ukwamani street were extremely congested and this might explain the easy transmission of skin and ENT related diseases.
### Table 4.6

**Distribution of types of self-reported illness episodes by spatial location**

<table>
<thead>
<tr>
<th>Description</th>
<th>Street &amp; squatter location</th>
<th>Mzimuni 1</th>
<th>Ukwamani</th>
<th>Mlalakua</th>
<th>Mzimuni2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Malaria</strong></td>
<td></td>
<td>3833</td>
<td>3240</td>
<td>1514</td>
<td>1651</td>
<td>10238</td>
</tr>
<tr>
<td>/Fever</td>
<td></td>
<td>37</td>
<td>32</td>
<td>15</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td><strong>Diarrhoea</strong></td>
<td></td>
<td>621</td>
<td>390</td>
<td>62</td>
<td>136</td>
<td>1209</td>
</tr>
<tr>
<td></td>
<td></td>
<td>51</td>
<td>32</td>
<td>5</td>
<td>11</td>
<td>100</td>
</tr>
<tr>
<td><strong>Accident</strong></td>
<td></td>
<td>211</td>
<td>62</td>
<td>55</td>
<td>63</td>
<td>391</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54</td>
<td>16</td>
<td>14</td>
<td>16</td>
<td>100</td>
</tr>
<tr>
<td><strong>Dental</strong></td>
<td></td>
<td>77</td>
<td>20</td>
<td>103</td>
<td>80</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>7</td>
<td>37</td>
<td>29</td>
<td>100</td>
</tr>
<tr>
<td><strong>Skin/ENT</strong></td>
<td></td>
<td>520</td>
<td>1479</td>
<td>480</td>
<td>566</td>
<td>3046</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
<td>49</td>
<td>16</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td><strong>Respiratory</strong></td>
<td></td>
<td>107</td>
<td>0</td>
<td>35</td>
<td>0</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td></td>
<td>75</td>
<td>0</td>
<td>25</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td><strong>Hernia</strong></td>
<td></td>
<td>0</td>
<td>101</td>
<td>7</td>
<td>31</td>
<td>138</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>73</td>
<td>5</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td><strong>Caesarean</strong></td>
<td></td>
<td>0</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td><strong>Heart Problems</strong></td>
<td></td>
<td>116</td>
<td>65</td>
<td>57</td>
<td>83</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td></td>
<td>36</td>
<td>20</td>
<td>18</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td><strong>HIV/AIDS</strong></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td><strong>Diabetes</strong></td>
<td></td>
<td>231</td>
<td>57</td>
<td>35</td>
<td>136</td>
<td>460</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50</td>
<td>12</td>
<td>8</td>
<td>30</td>
<td>100</td>
</tr>
<tr>
<td><strong>Other Illnesses</strong></td>
<td></td>
<td>241</td>
<td>437</td>
<td>93</td>
<td>177</td>
<td>947</td>
</tr>
<tr>
<td></td>
<td></td>
<td>25</td>
<td>46</td>
<td>10</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td><strong>Other Chronic</strong></td>
<td></td>
<td>801</td>
<td>574</td>
<td>218</td>
<td>450</td>
<td>2043</td>
</tr>
<tr>
<td></td>
<td></td>
<td>39</td>
<td>28</td>
<td>11</td>
<td>22</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>6757</td>
<td>6450</td>
<td>2660</td>
<td>3475</td>
<td>19342</td>
</tr>
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<td></td>
<td>35</td>
<td>33</td>
<td>14</td>
<td>18</td>
<td>100</td>
</tr>
</tbody>
</table>

---

**Key:**
- Weighted counts
- Row percentages (Italic, Bold)
- Number of observations = 733

---

*Source: Author’s Household Survey Data*
Diarrhoea is the third most significant problem reported by individuals in the surveyed area. Table 4.5 reveals that about six per cent of all self-reported illness episodes were due to diarrhoea. However, diarrhoea also affects more individuals in squatter areas than in non-squatter areas. The data indicates that 83 per cent of all reported diarrhoea cases were from the squatter area and only 16 per cent were from non-squatter areas (See Table 4.6). The fact that the poorer households located in squatter areas face the problem of inadequate provision of safe water supply and sanitation facilities helps explain the unequal distribution of this illness. Table 4.5 also indicates the rate of self-reported HIV/AIDS cases to be low; this could be because of stigmatisation associated with this illness makes individuals reluctant to reveal this information.

4.3 Access and Utilisation of Health Care Services: Where Did the Poor Go?

This section will answer questions that link the utilisation pattern of health care services with the spatial location and asset differentiation of the population. Some specific questions addressed are, does your welfare level and where you live matter in accessing decent health care services? Which group is most affected? Out of all the episodes recorded in the household survey, about 70 per cent visited health care facilities and the remaining 30 per cent did not consult any health care providers. This section specifically analyses the component of those episodes where the individuals consulted health care providers. Where did patients go and why did they choose to go there? The subsequent section will then analyse the second component for those who did not consult health care providers, including the main reasons that attributed to this problem.

As mentioned in the introductory chapter, health care provisions are organised into different tiers (See Chapter 1, Section 1.3.5). This section classified the lower health care facilities to include primary dispensary level and advanced primary level (health centres), whereas the analysis of higher levels health care facilities includes the municipal hospital and other hospitals including tertiary level hospitals. The analysis also takes into account the utilisation of these facilities from both public and private sectors. In addition, the utilisation of other sources of care also receives consideration here that is, the analysis and utilisation of traditional and spiritual healers.
Table 4.7
Utilisation of health care services at household level, by asset levels

<table>
<thead>
<tr>
<th>Facility</th>
<th>HH assets indicator</th>
<th>Visited</th>
<th>poorer</th>
<th>middle</th>
<th>better</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Disp/HC</td>
<td></td>
<td>1236</td>
<td>1020</td>
<td>149</td>
<td>2405</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20</td>
<td>21</td>
<td>6</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Private Disp/HC</td>
<td></td>
<td>2881</td>
<td>2083</td>
<td>397</td>
<td>5362</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>46</td>
<td>42</td>
<td>16</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Private Hosp</td>
<td></td>
<td>219</td>
<td>764</td>
<td>1673</td>
<td>2655</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>15</td>
<td>68</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Public Hosp</td>
<td></td>
<td>1680</td>
<td>1031</td>
<td>220</td>
<td>2932</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>21</td>
<td>9</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>Tradition/Spiritual</td>
<td></td>
<td>213</td>
<td>32</td>
<td>16</td>
<td>261</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6229</td>
<td>4931</td>
<td>2456</td>
<td>13615</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (italic, bold)
Number of observations = 528

Pearson:
Uncorrected chi²(8) = 189.4115
Design-based F(4.51, 257.21) = 9.9686 P = 0.0000

Source: Author’s Household Survey Data

4.3.1 High dependence of the poor on private dispensaries

This study reveals a high dependency of poor and middle level households on private dispensaries and therefore low utilisation of the higher-level health care facilities. Table 4.7 indicates that out of the visits made by the poorer group to health care providers, 20 per cent and 46 per cent of the visits were to public and private dispensaries respectively. The result for the middle strata also depicts a similar pattern of utilisation, whereby out of the total visits made by this group, 21 per cent and 42 per cent of the visits were to public and private dispensaries respectively.
The key point that these results depict is that the poorer mostly use services at the dispensary level, but at this level, they use predominantly services offered by private dispensaries rather than those provided by public dispensaries. In this regard, the public dispensaries are avoided relative to the private dispensaries. This finding is interesting as one would expect the poorer (including the middle strata) to rely on public health care provisions since they are cheaper and have a defined exemption structure. A number of factors explain this phenomenon, which this thesis explores and in subsequent chapters (chapter six and chapter seven).

Overall, poorer and middle level households use fewer services provided at hospitals level (both public and private) than better-off households do. Table 4.7 indicates that the poorer and the middle level visits to hospitals were 31 per cent and 36 per cent respectively, compared to 77 per cent of visits by better-off households. However, for the poorer households, when the services at the hospital level are needed (for specialised care) they rely more on public hospitals (27%) than the services provided by private hospitals (4%). The high expense of services provided at private hospitals explains this finding (See Chapter 5, Section 5.2). In this regard, the poor find themselves relying more on the services offered by private dispensaries as they are cheaper, and in most cases they allow deferred payments, that easily accommodates the financing of these services by the poor (See Chapter 5, Section 5.4 and Chapter 7, Section 7.3.2). The utilisation of hospital services by the middle level households is balanced between the services offered by public and private hospitals as compared to the poorer households (See Table 4.7).

The utilisation analysis of health care services by spatial location reveals that location matters in shaping the health seeking behaviour of the poorer group (See Table 4.8). The pattern of utilisation by the poor according to location reveals different features as compared to the pattern of utilisation exclusively by welfare levels. Depending on where the poor are located, they will tend to access the health care services that are more convenient given their circumstances. The overall pattern of utilisation of health care services by the poor according to spatial location indicates that the poor depend more on the services offered by public/private dispensaries and public hospitals. However, the magnitude of utilisation of the services from these sources indicates a mixed pattern depending on location of the poor.
The results in Table 4.8 indicate a mixed position for the poor in squatter and middle density areas. Table 4.8 shows that the poorer households located in Mzimuni[1] (squatter) depend heavily on the services offered by the private dispensaries whereas those located in Ukwamani (squatter) and Mlalakua (middle density) depend substantially on the services provided by both private/public dispensaries and public hospitals. One can explain the heavy reliance by the poor in Mzimuni [1] on the services provided by the private dispensary by the fact that the only public dispensary in that area has a bad reputation for its services and the behaviour of health workers. This might be discouraging the poor in the neighbourhood from seeking health care services at this facility (See Chapter 6, Section 6.1.3). Therefore, the remaining option is to rely on services provided by private dispensaries around the area. For Ukwamani squatters the situation is different; the poorer households depend more on the services provided by the public hospital than those at the dispensary level. The most likely explanation for this is the fact that

### Table 4.8

**Utilisation of health care services of the poorer group, by spatial location**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Disp/HC</td>
<td>386</td>
<td>600</td>
<td>215</td>
<td>34</td>
<td>1236</td>
</tr>
<tr>
<td>Private Disp/HC</td>
<td>2009</td>
<td>586</td>
<td>147</td>
<td>139</td>
<td>2881</td>
</tr>
<tr>
<td>Private Hospital</td>
<td>19</td>
<td>39</td>
<td>8</td>
<td>153</td>
<td>219</td>
</tr>
<tr>
<td>Public Hospital</td>
<td>468</td>
<td>818</td>
<td>195</td>
<td>201</td>
<td>1680</td>
</tr>
<tr>
<td>Public Hospital</td>
<td>16</td>
<td>40</td>
<td>34</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>2882</td>
<td>2043</td>
<td>565</td>
<td>527</td>
<td>6016</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Bold, Italic)
Number of observations = 204
Pearson:
Uncorrected $\chi^2(9) = 185.3034$
Design-based $F(4.83, 275.18) = 4.9006$  $P = 0.0003$

Source: Author’s Household Survey Data
the households located in this part of the squatter area are located near an army hospital where they can easily access services.

The poor in Mlalakua hamlet utilise more the services offered by the public dispensaries as compared to those from private dispensaries. The fact that the public dispensary located in this hamlet is perceived to offer slightly better services than the one located in the squatter area can explain the behaviour of the poorer in Mlalakua. During the field visit to this dispensary, the behaviour of health care workers towards patients was observed to be more pleasant compared to the public dispensary located in Mzimuni squatter area (See Chapter 6, Section 6.1.3).

Further, the results for the poor located in the better-off area Mzimuni[2] indicate a different position. This group of poor depends more on services provided at the hospital level (67%), both public and private. The fact that in this neighbourhood, there is no public dispensary and there are very few private dispensaries explains this result. There is limited choice at the dispensary level and therefore a greater reliance on hospital facilities located around the neighbourhood. The public hospital (army hospital) is located near the neighbourhood and this justifies higher utilisation of public health care services by the poorer in Mzimuni[2] non-squatter areas. Therefore, the results in Table 4.8 depict mixed utilisation of services by the poor situated in different spatial locations that is, private/public facilities at different levels. These findings also indicate that, given a good choice, the poor will struggle to access the subsidised health care service offered by public dispensaries compared to those offered by private dispensaries.

4.3.2 Private hospitals are for the better-off

This study found that individuals from better-off households utilises predominantly the private hospitals as their main source of health care services. The household data reveals that 68 per cent of visits made by individuals from better-off households were to private hospitals (See Table 4.7).

Furthermore, the utilisation of health care services of the better-off group by spatial location indicates a slightly different pattern. Table 4.9 indicates that the better-off individuals located in a low-density area (Mzimuni [2]) visited the private hospitals more than other sources of care. However, the better-off individuals located in squatter areas (Ukwamani) and middle density areas (Mlalakua) visited private hospitals but
also to a greater extent visited dispensary levels of care, in particular the private dispensaries (see Table 4.9). This phenomenon is explained by the fact that better-off individuals located in a non-squatter area are likely to be wealthier than better-off individuals located in a squatter area are, and therefore they can easily afford private hospital services.

Table 4.9

<table>
<thead>
<tr>
<th>Facility</th>
<th>Ukwamani</th>
<th>Mlalakua</th>
<th>Mzimuni[2]</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>47</td>
<td>72</td>
<td>31</td>
<td>149</td>
</tr>
<tr>
<td>Disp/HC</td>
<td>16</td>
<td>21</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Private</td>
<td>75</td>
<td>137</td>
<td>185</td>
<td>397</td>
</tr>
<tr>
<td>Disp/HC</td>
<td>25</td>
<td>41</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Private</td>
<td>106</td>
<td>120</td>
<td>1447</td>
<td>1673</td>
</tr>
<tr>
<td>Hospital</td>
<td>36</td>
<td>36</td>
<td>80</td>
<td>69</td>
</tr>
<tr>
<td>Public</td>
<td>70</td>
<td>6</td>
<td>145</td>
<td>220</td>
</tr>
<tr>
<td>Hospital</td>
<td>24</td>
<td>2</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>297</td>
<td>335</td>
<td>1807</td>
<td>2439</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (italic, bold)
Number of observation = 106
Pearson: Uncorrected \( \chi^2(6) = 148.2085 \)
Design-based \( F(3.41, 160.07) = 3.5178 \) \( P = 0.0128 \)

Source: Author’s Household Survey Data

The qualitative information obtained from respondents from better-off households indicates that the main driving force for utilising private hospitals is the good quality of care provided by these facilities and their ability to finance these services. Even though charges at private hospitals are high, in most cases, the services provided are of good quality compared to other facilities and the respondents can afford to finance these services. The key services that often attract patients from the better-off group include availability of good brands of drugs; good laboratory facilities; better qualified/trained staff; cleaner facilities; wider selection of
drugs and laboratory tests available; use of private insurance schemes; and the availability of specialised care.

“We can afford to pay for medical care and we usually go to good private hospitals that are reputable and with qualified health workers. As the cost is not the issue, it is the service we are looking for”. (Male, 54 years old, better-off, low density area).

“The government hospitals lack good attendants. There is lack of modern equipment as well as long queues, hence for me to save time and be satisfied I prefer private hospitals for my family and relatives. The cost of services in a good private hospital is not cheap, you must be earning enough to afford the services offered” (Male, 62 years old, better-off, low-density area).

There is very low utilisation of public health care services (across all levels) by the better-off group. Table 4.7 indicates that only 15 per cent of the total visits made by individuals from better-off households were to public health care facilities. The qualitative information reveals that individuals from better-off households would consider utilising the public facilities mainly to access specialised services that are not available and/or are cheaper than at private facilities. In addition, they avoid public services due to the bureaucracy and other problems associated with accessing these services. For example, lack of adequate drugs and other medical supplies, long wait times, abuse by health care workers, and so on (See also Chapter 6, Section 6.1).

“There is a lot of bureaucracy in government hospitals hence for one to be attended properly you have to bribe the nurses or doctors. This is the big reason why people with high incomes dislike going there. Many would consider it only when they need some specialised services, which are not available in private hospitals” (Female, 55 years old, better-off, low-density area).

“There is a lot of queues in public hospitals. One has to wait for a very long time before they are attended. The services are also not very satisfactory as drugs are not available in many cases. In this regard, since I am covered by medical insurance I prefer to take my family to private hospitals” (Male, 55 years, better-off, low-density area).
4.3.3 By-pass of public health centres

Public health centres are supposed to be an important referral link between the municipal hospital and dispensaries from both private and public sectors. Public health centres are supposed to provide more advanced services than the dispensary, including admission of patients (operating like mini-hospitals). However, most patients find it rational to go straight to the municipal hospital because of perceived inadequacies at the health care centre level. In addition to this, public health centres are few and can be located far from the population they intend to serve. For example, there are two public health centres available in Kinondoni municipality (Sinza Health Centre and Magomeni Health Centre), both located far from the surveyed area.5

Information from the household survey reveals that out of all the visits made to different health care providers, only two cases consulted the public health centres. The respondents interviewed revealed that they did not see it as an important referral link because these facilities lack most important specialised care and therefore it is a waste of time and other resources to go to this level of care before consulting the municipal hospital. From the patient’s perspective, this is a sensible decision given that, at each level of care in the public health care system, they have to pay a user fee, including referral cases. Since they have to pay at each level of care, they see it as a waste of resources to try the public health centre while unsure of the services provided.

Provider interviews confirm the reality of people bypassing public health centres. Interviews and observations also revealed that referring a patient to available public health centres might be a waste of time and transportation resources as, in most cases these patients will require eventual required to be transferred to the municipal hospital. One of the respondents from the public dispensary was quoted as follows:

“The available health centres are operating just as any other public dispensary in terms of the services provided, they also lack qualified staff, drugs and other facilities to deal with complicated cases; therefore it is really not worth it for us to refer patients to this level”. (Clinical Officer in Charge, public dispensary, non-squatter area).
4.3.4 The Poor in squatter areas and utilisation of traditional healers

Overall, there has been low utilisation of traditional and spiritual healers reported in this study, about two per cent of all reported visits (See Table 4.7). However, the few cases reported were mainly from the poorer households in the squatter areas. Of the total visits made to health care facilities by the poorer and middle level groups, three per cent and one per cent went to traditional/spiritual healers (See Table 4.7). This is also the case when examining the distribution of these visits by spatial location. Of the visits made to traditional and/or spiritual healers reported by the poorer group, none of the visits were made by the poorer households located in the better-off neighbourhood of Mzimuni [2].

<table>
<thead>
<tr>
<th>Household level, ever paid visit to spiritual or traditional healer by asset level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever paid visit to spiritual/traditional healer</td>
</tr>
<tr>
<td>HH assets indicator</td>
</tr>
<tr>
<td>Poorer</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>Middle</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>Better</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>6</td>
</tr>
</tbody>
</table>

Key: Weighted counts Row percentages (Italic, Bold) Number of observations = 299

Pearson:
Uncorrected $\chi^2(2) = 7.0375$
Design-based $F(1.96, 111.58) = 3.3184$ $P = 0.0408$

Source: Author’s Household Survey Data

On the other hand, this information is likely to be under-reported, because people are usually reluctant to reveal their involvement with traditional and spiritual healers as part of their health seeking behaviour.
For example, there is a sensitisation campaign for pregnant women and mothers with young children not to seek traditional/spiritual healing services but to seek biomedical care when they are not well. Due to such campaigns, people may be sensitive to revealing such information.

Furthermore, the household survey contained a question intended to see whether a particular household has ever sought care (for any of its household members) from spiritual or traditional healers. Table 4.10 indicates that of the total households surveyed, six per cent admitted to having consulted a traditional and/or spiritual healer. In addition, the distribution of these responses was higher for the respondents from poorer households compared to the respondents from middle and better-off households. In addition, more responses to this question (regarding visits to traditional/spiritual healers) were from households in the squatter areas (69%).

The main reasons provided by the households that paid visits to spiritual and/or traditional healers can be categorised as follows.

(i) **Presence of traditional/spiritual healing knowledge within household members;**

“When our son was sick, my husband gave him traditional medicines, because he is a traditional healer himself”. (Female, 52 years old, squatter area).

(ii) **Lower cost compared to formal health care services and presence of accommodative payment structure**

“My husband has been to a traditional doctor to treat his diarrhoea, where he just bought traditional drugs. The cost was about 500 Tsh. Money is our main problem most of the time, so one has to find cheaper ways of treatment” (Female, 24 years old, poorer, squatter area).

“I usually go to a traditional healer for my treatment. I pay about 2,000 Tsh. per year and then I can go for treatment whenever I get sick. This is very cheap compared to other sources of treatment” (Female, 30 years, poorer, squatter area).

“I did not get better after I went to the hospital. I am now seeking traditional treatment. The cost is 5,000 Tsh. for the entire treatment and I am allowed to pay the money in small instalments” (Male, 64 years, poorer, squatter area).
(iii) Seeking alternative treatment and support especially for chronic illness

“I take my husband for spiritual prayers at the Born Again Church in Kawe, this is our only hope. This is very helpful as it provides us spiritual support and we are hoping he will be cured. My husband has been paralysed for more than three months now. He used to be the main provider of household needs, he can no longer go to work and he has already been fired from where he was working as a driver.” (Female, 46 years old, poorer, squatter area).

“My late husband was sick for a very long time, it was a chronic illness, I took him to a traditional healer to try some traditional medicines as he did not respond to the western drugs.” (Female, 60 years old, middle level, non-squatter area).

4.3.5 Poor under five and high use of private dispensaries

The utilisation pattern of health care services by the poor according to age indicates a high reliance of poor children, including those younger than five years of age, on services provided by private dispensaries. About 47 per cent of the utilisation of health care services by those under five from poor households was from private dispensaries (See Table 4.11). This finding reveals the presence of inadequacies in public health service provisions because the under fives are entitled to free public services and one would expect higher utilisation of public dispensaries from children from poor households. More information on the problems facing the public health service provision is in Chapter 6.

The elderly from poor households (who also qualify for fee exemption) show a different pattern as they depend more on the public health care services than private services. The information on Table 4.11 indicates that 68 per cent of health care utilisation by the elderly (from poorer households) is from public health care facilities. These results suggest that poor elderly people lack adequate social support/protection (as compared to poor children who are supported by their parents) and therefore are left with no choice but to utilise inadequate public services.

Furthermore, the information in Table 4.11 indicates that older children (5-17 yrs) and adults (18-59 yrs) from poorer households comparatively try to avoid using services from public dispensaries more than the other two groups. The fact that these two age groups have no incentive to struggle to access the public dispensary services, as they are not under
the current exemption system explains this behaviour. However, it is worthwhile for them to access specialised services from public hospitals as they are cheaper than services provided at private hospitals (See Chapter 5, Section 5.2).

Unlike the poor households, the overall pattern of utilisation of health care services by individuals from better-off households suggests a great reliance on services provided by private hospitals across all age groups (See Table 4.12). However, this pattern is comparatively lower for children under five as they also seek services (though not as much) from private and public dispensaries. These results suggest that children under five from better-off households might also be benefiting from the under five clinics (including immunisation services) at nearby public and private dispensaries.

Table 4.11
Utilisation of health services of the poor group by age

<table>
<thead>
<tr>
<th>Facility Visited</th>
<th>Under-fives</th>
<th>5-17</th>
<th>Adults</th>
<th>Elderly60+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Disp/HC</td>
<td>660</td>
<td>115</td>
<td>324</td>
<td>137</td>
<td>1236</td>
</tr>
<tr>
<td>Private Disp/HC</td>
<td>891</td>
<td>470</td>
<td>1472</td>
<td>49</td>
<td>2881</td>
</tr>
<tr>
<td>Private Hospital</td>
<td>74</td>
<td>19</td>
<td>51</td>
<td>75</td>
<td>219</td>
</tr>
<tr>
<td>Public Hospital</td>
<td>258</td>
<td>364</td>
<td>929</td>
<td>130</td>
<td>1680</td>
</tr>
<tr>
<td>Total</td>
<td>1883</td>
<td>968</td>
<td>2776</td>
<td>390</td>
<td>6016</td>
</tr>
</tbody>
</table>

Key: Weighted counts
 Column percentages (Italic,Bold)
 Number of Observations = 204
 Pearson:
 Uncorrected $\chi^2$(9) = 85.7183
 Design-based $F(6.31, 359.49) = 3.4864$ $P = 0.0019$

Source: Author’s Household Survey Data
### Table 4.12
Utilisation of health services of the better-off by age

<table>
<thead>
<tr>
<th>Facility</th>
<th>Age Groups</th>
<th>Visited</th>
<th>Under five 5-17 yrs</th>
<th>Adults</th>
<th>Elderly 60+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Disp/HC</td>
<td></td>
<td>47</td>
<td>0</td>
<td>102</td>
<td>0</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>0</td>
<td>8</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Private Disp/HC</td>
<td></td>
<td>78</td>
<td>92</td>
<td>217</td>
<td>10</td>
<td>397</td>
</tr>
<tr>
<td></td>
<td></td>
<td>27</td>
<td>16</td>
<td>17</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Private Hospital</td>
<td></td>
<td>144</td>
<td>442</td>
<td>859</td>
<td>228</td>
<td>1673</td>
</tr>
<tr>
<td></td>
<td></td>
<td>49</td>
<td>76</td>
<td>66</td>
<td>84</td>
<td>69</td>
</tr>
<tr>
<td>Public Hospital</td>
<td></td>
<td>23</td>
<td>51</td>
<td>113</td>
<td>32</td>
<td>220</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>291</td>
<td>585</td>
<td>1292</td>
<td>270</td>
<td>2439</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observation = 106

**Pearson:**
- Uncorrected $\chi^2(9) = 39.5690$
- Design-based $F(5.25, 299.28) = 0.8241$  $P = 0.5383$

Source: Author’s Household Survey Data

### 4.3.6 Better-off male and high use of private hospitals

Table 4.13 presents results of the utilisation of health care services by individuals from the poorer group, based upon gender. The information reveals that the utilisation pattern of the individuals from the poorer households by gender does not indicate any striking differences between the two groups.

However, the pattern of utilisation of health care services of the better-off households by gender suggests that there might be a higher reliance of male individuals on the services provided by private hospitals as compared to female individuals. The overall pattern of utilisation of health care services for better-off households indicates high reliance on the services provided by private hospital as compared to poor house-
holds, but males in particular in better-off households utilise these services more (81%) than female individuals (57%) within the same households. Table 4.14 further suggests that females from better-off households also utilise the services provided by public facilities and private dispensaries more than male individuals within the same household. These results suggest that female individuals within better-off households might have weaker control of resources as compared to the male counterpart and therefore are unable to finance the services provided by private hospitals proportionately. That is there could also be some degree of rationing of family resources and due to gender discrimination it goes against female in a household. However, the evidence is rather weak and, hence, these conclusions are fairly tentative since the chi-tests indicates that the null-hypothesis of statistical independence between the two variables cannot be rejected.

Table 4.13
*Utilisation of health services of the poorer group by gender*

<table>
<thead>
<tr>
<th>Visited</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disp/HC</td>
<td>465</td>
<td>771</td>
<td>1236</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>22</td>
<td>21</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disp/HC</td>
<td>1160</td>
<td>1721</td>
<td>2881</td>
</tr>
<tr>
<td></td>
<td>47</td>
<td>49</td>
<td>48</td>
</tr>
<tr>
<td>Private</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>66</td>
<td>153</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>787</td>
<td>893</td>
<td>1680</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>25</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>2478</td>
<td>3539</td>
<td>6016</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observations = 204
Pearson:
Uncorrected  $\chi^2(3) = 3.5457$
Design-based $F(2.41, 137.34) = 0.2558 \quad P = 0.3142$

Source: Author’s Household Survey Data
### Table 4.14
Utilisation of health care services of better-off group by gender

<table>
<thead>
<tr>
<th>Facility</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>45</td>
<td>104</td>
<td>149</td>
</tr>
<tr>
<td>Disp/Hc</td>
<td>4</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Private</td>
<td>106</td>
<td>292</td>
<td>397</td>
</tr>
<tr>
<td>Disp/Hc</td>
<td>9</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>Private</td>
<td>948</td>
<td>725</td>
<td>1673</td>
</tr>
<tr>
<td>Hospital</td>
<td>81</td>
<td>57</td>
<td>69</td>
</tr>
<tr>
<td>Public</td>
<td>77</td>
<td>143</td>
<td>220</td>
</tr>
<tr>
<td>Hospital</td>
<td>7</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>1175</td>
<td>1264</td>
<td>2439</td>
</tr>
</tbody>
</table>

Key: weighted counts

<table>
<thead>
<tr>
<th>Column percentages (Italic, Bold)</th>
</tr>
</thead>
</table>

Number of observations = 106

Pearson:
- Uncorrected \( \chi^2(3) = 33.5578 \)
- Design-based \( F(2.48, 141.64) = 1.9586 \)  \( P = 0.1340 \)

Source: Author’s Household Survey Data

### Table 4.15
Lack of consultation to health care provider by asset level

<table>
<thead>
<tr>
<th>HH assets</th>
<th>Consultation to Health Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
<td>YES</td>
</tr>
<tr>
<td>-----------</td>
<td>-----</td>
</tr>
<tr>
<td>poorer</td>
<td>6229</td>
</tr>
<tr>
<td></td>
<td>68</td>
</tr>
<tr>
<td>Middle</td>
<td>4931</td>
</tr>
<tr>
<td></td>
<td>71</td>
</tr>
<tr>
<td>Better</td>
<td>2456</td>
</tr>
<tr>
<td></td>
<td>76</td>
</tr>
<tr>
<td>Total</td>
<td>13615</td>
</tr>
<tr>
<td></td>
<td>70</td>
</tr>
</tbody>
</table>

Key: Weighted counts

<table>
<thead>
<tr>
<th>Row percentages</th>
</tr>
</thead>
</table>

Number of Observations = 733

Pearson:
- Uncorrected \( \chi^2(2) = 2.9868 \)
- Design-based \( F(1.77, 101.02) = 0.5524 \)  \( P = 0.0564 \)

Source: Author’s Household Survey Data
4.4 Poverty and Exclusion in Access to Health Care Services

There is a close association between poverty, spatial location and exclusion from access to health care services. The provision of health care services is highly commercialised and this makes it harder for individuals, especially from poorer households, to access health care services when they are ill and/or injured. Data from the household survey reveals that out of all the reported illness episodes, 30 per cent did not consult any health care provider when ill/injured. Table 4.15 indicates that lack of consultation to health care providers affected poorer and middle level households more than better-off households. Of the reported illness episodes from poorer and middle level households, 32 per cent and 29 per cent respectively did not consult any health care provider. The situation was slightly better for the better-off households where about 24 per cent did not consult any health care provider when ill/injured. Strictly speaking, at 5 per cent significance level, the null hypothesis of statistical independence cannot be rejected, but the probability value of 0.0564 is only slightly above this cut-off point. Caution should be taken, therefore about this result.

The analysis by spatial location is less strong. Table 4.16 suggests that the problem of lack of consultation to health care providers affects more the individuals residing in high-density (squatter) areas, and the problem is especially severe for individuals from the Mzimuni [1] squatter area. This situation can be explained by problems associated with the public dispensary located in this area (See Chapter 6, Section 6.1.3). Furthermore, lack of consultation appears less severe for individuals residing in low-density areas Mzimuni [2]. The chi-square test, however, shows that the null-hypothesis of statistical independence between both variables cannot be rejected. More evidence is needed to establish this relation, particular by considering the reasons for lack of consultation by household (see below).

The analysis of lack of consultation for individuals ill/injured by age group indicates an alarming pattern. Table 4.17 indicates that lack of consultation with health care providers mostly affected the elderly (60 years and above). Of all the reported illness episodes from the elderly group, nearly half did not consult any health care provider. The situation is alarming and therefore adequate policy measures need to be in place to address this problem.
Unlike age, the analysis of lack of consultation by gender for the ill/injured does not show any significant difference between the two groups (see Table 4.18). The chi-square statistic indicates that the null-hypothesis of statistical independence between both variables cannot be rejected.

### Table 4.16

**Lack of consultation to health care provider by spatial location**

<table>
<thead>
<tr>
<th>Street</th>
<th>Consultation to Health Provider</th>
<th>YES</th>
<th>NO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mzimuni[1]</td>
<td></td>
<td>4269</td>
<td>2489</td>
<td>6757</td>
</tr>
<tr>
<td></td>
<td></td>
<td>63</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>Ukwamani</td>
<td></td>
<td>4705</td>
<td>1745</td>
<td>6450</td>
</tr>
<tr>
<td></td>
<td></td>
<td>73</td>
<td>27</td>
<td>100</td>
</tr>
<tr>
<td>Mlalakua</td>
<td></td>
<td>1963</td>
<td>697</td>
<td>2660</td>
</tr>
<tr>
<td></td>
<td></td>
<td>74</td>
<td>26</td>
<td>100</td>
</tr>
<tr>
<td>Mzimuni[2]</td>
<td></td>
<td>2679</td>
<td>796</td>
<td>3475</td>
</tr>
<tr>
<td></td>
<td></td>
<td>77</td>
<td>23</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13615</td>
<td>5727</td>
<td>19342</td>
</tr>
<tr>
<td></td>
<td></td>
<td>70</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 733

Pearson:  
Uncorrected $\chi^2(3) = 10.5759$  
Design-based $F(2.24, 127.61) = 1.6471$  
P = 0.1934

Source: Author’s Household Survey Data

In summary, overall there is high rate of not consulting with health care providers, especially for individuals from poorer and middle level households. The following are the main reasons put forward by the respondents from the household survey and the exit patient interviews to explain this problem.
### Table 4.17
Lack of consultation with health care provider by age group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Consultation with Health Provider</th>
<th>YES</th>
<th>NO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under five</td>
<td></td>
<td>3118</td>
<td>379</td>
<td>3497</td>
</tr>
<tr>
<td>6-17 yrs</td>
<td></td>
<td>2823</td>
<td>1059</td>
<td>3883</td>
</tr>
<tr>
<td>Adults</td>
<td></td>
<td>6808</td>
<td>3473</td>
<td>10281</td>
</tr>
<tr>
<td>Elderly60+</td>
<td></td>
<td>866</td>
<td>815</td>
<td>1682</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13615</td>
<td>5727</td>
<td>19342</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 733

Pearson:  
Uncorrected chi2(3) = 36.9209  
Design-based F(2.28, 129.70) = 6.0986  P = 0.0019

### Table 4.18
Lack of consultation with health care provider by gender

<table>
<thead>
<tr>
<th>Sex of household members</th>
<th>Consultation with Health Provider</th>
<th>YES</th>
<th>NO</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td>5943</td>
<td>2376</td>
<td>8319</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td>7672</td>
<td>3351</td>
<td>11023</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>13615</td>
<td>5727</td>
<td>19342</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Row percentages (Italic, Bold)  
Number of observations = 733

Pearson:  
Uncorrected chi2(1) = 0.2926  
Design-based F(1, 57) = 0.2336  P = 0.6307

Source for Tables 4.17 and 4.18: Author’s Household Survey Data
4.4.1 High cost excludes the poor from accessing care

The cost associated with access to health care services plays an important role in denying access to health care services especially for individuals in poorer households (Garner and Thaver 1993; Gilson 1997; Hansen and Berman 1998). This study reveals that individuals from poor and middle level households often find themselves unable to consult a health care provider when ill mainly due to the high cost associated with accessing health care services. Table 4.19 indicates that the main reason given by poorer and middle level households for not consulting a health care provider is that they find the cost of accessing health care services too expensive. Therefore, for these two welfare groups, and mostly the poor, cost acts as a main driving force for the exclusion process in accessing health care services. Table 4.19 indicates that out of all the episodes from the poorer group where no health care provider consultation took place, 46 per cent did not do so because the cost was prohibitive. However, this problem was quite low for better-off households where of all cases that did not consult any health care provider only nine per cent did so because of the higher cost of accessing care. The problem of the higher cost of accessing care also affected the middle level group; although slightly less than its impact on the poorer group. Of all the cases from middle level households that did not consult any health care provider, about 37 per cent did so because of the high cost of accessing health care providers. The exclusion of poor and middle level households due to inability to finance health care services indicates weak protection mechanisms in place to ensure access to health care services for those unable to pay. In the urban setting and in Dar es Salaam in particular, the Community Health Fund (CHF) is not in place and there is also a weak exemption system for those unable to finance care (See Chapter 6, Section 6.2).
**Table 4.19**

*Reasons for no consultation with health care providers*

<table>
<thead>
<tr>
<th>Reasons</th>
<th>HH assets indicator</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>poorer</td>
<td>middle</td>
</tr>
<tr>
<td>No Need</td>
<td>200</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>Too Expensive</td>
<td>1354</td>
<td>748</td>
</tr>
<tr>
<td></td>
<td>46</td>
<td>37</td>
</tr>
<tr>
<td>Bought Drugs</td>
<td>1272</td>
<td>595</td>
</tr>
<tr>
<td></td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td>Other Reasons</td>
<td>116</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>2941</td>
<td>2016</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Key: weighted counts

Column percentages (italic, bold)

Number of observations 205

Pearson:

Uncorrected $\chi^2(6) = 139.6102$

Design-based $F(3.81, 217.07) = 2.9339$ P = 0.0236

Source: Author’s Household Survey Data

### 4.4.2 Purchase drugs direct from pharmacies/self-medication

Direct consultation with drug store/pharmacies by individuals who are ill/injured is one of the main problems facing the current health care market. In all three surveys conducted in this study (household, provider and exit patient interviews), direct consultation with pharmacies/drug stores was revealed widely practiced by individuals across all welfare levels. Due to the absence of a tight regulatory system in the current health care market, people are able to purchase prescription drugs directly from drug stores without a prescription (See Chapter 7, Section 7.3). Some drug stores even go a step further and offer consultation services directly to individuals (Mujinja 2003). However, the practice of purchasing prescribed drugs over the counter is unethical and illegal in Tanzania.

Nevertheless, many users of health care services (across all welfare levels) find this practice convenient in terms of time and lower costs to
access the services. Other than the cost of purchasing the drugs, patients do not incur many other associated costs such as consultation and/or laboratory fees. The services also can be accessed quickly, as patients do not have to wait in the queue waiting for registration, consultation and/or laboratory services as it is the case when visiting a health care facility. Table 4.19 indicates that out of all cases that did not consult any health care provider, 38 per cent opted for self-medication through the purchase of drugs directly from the pharmacy/drug store. This problem seems to be affecting individuals across all household levels but with a slight inclination towards those from poorer households. Table 4.19 indicates that out of all cases that did not consult any health provider from poorer households, 43 per cent did so because they purchased drugs directly from the pharmacy/drug store. This rate was lower for the better-off households. Of all cases that did not consult any health care provider from the better-off 30 per cent opted for self-medication.

Table 4.20
Exit patient interviews: Incidence of self-medication before seeking care

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>40</td>
<td>29</td>
</tr>
<tr>
<td>No</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Author’s Exit Patient Interviews

Information from exit patient interviews also confirms the problem of self-medication practices as shown in the household survey. The findings from the exit patient interviews indicate that out of 140 cases interviewed, 29 per cent of patients went through self-medication before consulting a health care provider (See Table 4.20). The main reasons given for undergoing self-treatment before consulting a health care provider were that it was cheaper and more convenient to purchase drugs from the pharmacies/drug stores. Furthermore, they revealed that some pharmacies/drug stores even provide free consultation services. However, in some cases people thought it was better to wait and see how the illness progressed before consulting a health care provider and in those
cases they bought non-prescription drugs (painkillers, for example) as part of the practice of home remedy in dealing with an illness. The following is a summary of the main reasons for undergoing self-treatment together with some of the quotations from the exit interviews.

**Cheaper and more convenient**

“I bought Metakelfin (anti-malaria) over a week ago. I had high fever and I thought I should buy anti malaria drugs at the pharmacy to avoid the hassle of coming to the hospital. However, the problem continued and I decided to come to the hospital”. (Male, 33 years old, private dispensary, squatter area).

**Provision of free consultation services lowered the cost of care**

“I bought drugs from the nearby pharmacy. There, I explained how I felt and I was given drugs, which I paid 1500 Tsh. I thought this was the cheapest way of being cured as I did not have to pay for the laboratory test. But at night, the condition got worse and early in the morning I had to be rushed to the hospital” (Female, 27 years old, private hospital).

**Underestimation of illness**

“Before coming to this health centre I did not know I have Tuberculosis (TB), I thought it was either malaria or flu. So I just used to go to the pharmacy and buy drugs for malaria and the flu.” (Female, 38 years old, public health centre).

**4.4.3 Other reasons for not consulting health care providers**

Other reasons mentioned by respondents from the household survey regarding lack of consultation to a health care provider when they were ill/injured include no need for consultation (the illness is not that severe), distance to health care facilities and that consulting a health care provider is time consuming. Table 4.19 indicates that 12 per cent of the cases that did not consult any health care provider when ill/injured did so because they thought there was no need to consult a health care provider for that specific illness episode. This indicates that for some illness episodes people would be in a wait and see situation, analysing the progress of their illness before deciding to seek health care services. As we have seen in the theoretical chapter, health care seeking models outline several factors that influence people to seek health care services and why
Health Seeking Behaviour and Utilisation of Health Care Services

people do it differently (See Chapter 2, Section 2.3). More often, knowledge and risk assessments on the type and severity of illness play a role in determining health care seeking practices. Furthermore, for different illnesses people have different opinions and decision towards on seeking care. This also explains the socio-cultural influence towards health seeking behaviour.

Distance to health care facilities was observed not to be a problem, especially for the poorer households located in squatter areas. During the fieldwork for this study, the researcher observed that the dispensaries (especially the private dispensaries) were very close to the people in squatter and middle level households. The few cases that indicated distance created a problem in accessing health care services came from both better-off and poorer households located in non-squatter areas. This might be because the pattern of seeking health care services for the better-off indicates a demand for private hospital services, which can be located far from their residential location, whereas for the poorer located in non-squatter areas, access to dispensary level of care could be a problem as not many dispensaries are available in these locations.

Time consumed in seeking health care services is another important factor that determines health care seeking practices. Some people find it inconvenient to spend significant amounts of time consulting a health care provider. This study observed high congestion especially in public health care facilities, and sometimes patients (especially those with exemptions) complained that even after the long wait they were not assured of receiving the adequate services demanded. Therefore, this problem might lead to some people being discouraged from seeking health care services, especially at public facilities (See Chapter 6, Section 6.1.3).

4.5 Trade-Off between Cost and Quality in Choosing a Health Care Facility

The household decision to choose a health care provider is associated with a trade-off between costs involved and quality of services. These two main elements have a great influence on the decision of the consumer on where to seek medical care. This section highlights the existing trade-off between these two aspects whereas the forthcoming chapters provide in-depth analysis of these aspects.

The cost and the quality of care are key determinants in the choice of health care provider to both the better off and the poor. However, it is
likely that the trade-off between both these elements – cost and quality-differs depending on whether the household is poor or better off. The better off may be considering the cost and quality at the hospital level, while the poor consider this mainly at the dispensary level. In addition, the magnitude of welfare level across different groups is likely to influence the trade-off between these two dimensions: costs and quality. More specifically, it is reasonable to postulate that, in making the decision to choose a health care provider, the poor are more influenced by cost, while the better-off are influenced more by quality.

**Table 4.21**

Choosing a health care provider: Cost vs. quality

<table>
<thead>
<tr>
<th>Reason</th>
<th>HH assets indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>poorer/ middle</td>
</tr>
<tr>
<td>Quality</td>
<td>3851</td>
</tr>
<tr>
<td></td>
<td>43</td>
</tr>
<tr>
<td>Costs</td>
<td>5018</td>
</tr>
<tr>
<td></td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>8869</td>
</tr>
<tr>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Key: Weighted counts
Column percentages (Italic, Bold)
Number of observations = 409

Pearson:
Uncorrected $\chi^2(1)$ = 47.2083
Design-based $F(1, 57)$ = 7.2110  $P = 0.0095$

Source: Author’s Household Survey Data

To test this hypothesis it is necessary to construct a variable that focuses explicitly on the quality versus costs distinction as viewed/perceived by health seekers. In defining this variable, the quality dimension depicts the choice of a health facility because of good or adequate quality of care, or availability of drugs, or qualifications and attitudes of health workers. The cost dimension depicts both the choice of a health care facility because it is cheap or the failure to visit any health facility
because it is deemed to be too expensive. Other reasons given – by far the most important of which was close distance to the facility - were not included in the definition of this variable since they cut across the quality versus cost distinction.

Table 4.21 suggests that both cost and quality matter in making the decision towards choosing a health care provider. However, the trade-off between the two aspects varies across different welfare levels. The poorer and middle level households put less emphasis on the quality component compared to the cost involved in accessing health care services. The better-off group places greater emphasis on the quality of care compared to the cost involved. Table 4.21 indicates that for better-off households, 79 per cent list quality of care as the most significant influence in their decision to choose a health care provider while for the poorer/middle level households (taken together), it is 43 per cent. This finding indicates that for poor and middle level households the cost involved in accessing care plays an important role in their decision to choose a provider while the reverse applies to the better-off group.

4.6 Summary: Key Findings

- The pattern of diseases is influenced by population characteristics (e.g. age, gender), welfare level and spatial location. The poor, specifically those located in squatter areas, had more illness episodes (especially malaria/fever and diarrhoea) compared to those in non-squatter areas. Malaria/fever and diarrhoea are among the main diseases affecting the population of the surveyed area, particularly those in squatter areas. Age and gender also matter in defining the pattern of diseases. Children under five and those residing in squatter areas are most affected. Furthermore, female adults have more illness episodes than male adults of the same age group.

- This chapter provides a first step analysis of the existence of segmentation mechanisms that influence health care seeking behaviour and utilisation of health care services. The pattern of utilisation of health care services indicates that poor households and especially those located in squatter and medium density areas rely heavily on the services provided at the dispensary level, particularly those services provided by private dispensaries. Given limited choices (availability and quality of care), the poor also tend to avoid services offered by public
dispensaries relative to private dispensaries. Further, poorer households make less use of hospital level services overall, but when needed, they rely more on public hospital services. However, the pattern of better-off households is different as they utilise predominantly the services provided by private hospitals. Therefore, this segmentation mechanism is influenced by the household's spatial location and its welfare level.

- There is a close association between poverty, spatial location and exclusion from access to health care services. The results from this study indicate that there is a substantial problem of not consulting health care providers when individuals fall ill. However, this problem affects mostly individuals from poorer households, particularly those located in squatter and medium density areas. The elderly group is also highly affected. The main reasons for not consulting health care providers when ill/injured also differ among individuals coming from different welfare households. Research shows that for the poor, this problem comes mainly from the high cost of accessing care. In other words, they find the cost of consulting a health care provider too expensive. Thus, the poor either opt to forgo care or opt for self-medication as an alternative way of saving on medical expenses. On the other hand, for individuals from better-off households, the main reason for abstaining from care is not cost but the convenience of self-medication, saving time and/or a wait and see option to see how the illness progresses.

- The theoretical division of the tier system in the provision of public health care services does not work in practice. This is because the poor find it rational to bypass the public health centre level (which is also limited in number) due to insufficient services at this level and because they have to pay a user fee at each level of care. In this case, they find it rational not to waste their limited resources (including time) due to the uncertainty of services provided at this level.

- The segmentation mechanism in health seeking behaviour and utilization of health care services is also influenced by the existing trade-off between the cost involved and the quality of health care services provided. The decision for the better-off is influenced more by the aspect of quality whereas for poorer and middle level household de-
Decisions are influenced more by the cost involved in accessing health care services.

Notes

1. 73% of children under five are located in squatter areas in the population sample.
2. Proportion of female adults is 49% in the population sample with 51% male adult.
3. 47% of individuals in the population sample reside in the squatter areas with 53% in non-squatter areas.
4. During fieldwork, it was difficult to locate and sample the private dispensaries in this neighbourhood.
5. Kinondoni municipality has only two public health centres: Sinza and Magomeni health centres.
6. Distribution of households by welfare level in the sample is as follows: poor 40%, middle 40% and better-off 20%.
5.1 Introduction

Figure 5.1
The logical framework: Price differentials and segmentation in the health care market

This chapter examines the dynamics of the health care market in relation to pricing and payment structures, and its influence on the segmenta-
Price Differentials, Payment Structure and Segmentation Mechanism

Pricing is the core element of interaction and segmentation in the health care market. The interaction of the pricing process with poverty and the organisation of the health care system explain how the segmentation process happens in the health care market within the context of demand and the supply sides. On the supply side the price structure is mainly shaped by the level, sector and geographical location of the health care facility. On the demand side the pricing structure is mainly influenced by the ability to pay of the consumers of health care services given the existing payment structure.

The logical framework provided in Figure 5.1 presents the key argument addressed in this chapter. The basis for this logical framework is the analytical framework provided earlier in the theoretical chapter (See Chapter 2, Section 2.5). This chapter argues that price determination emerges in health care markets from the interaction between supply and demand sides, and is shaped by (i) supplier behaviour, (ii) consumer behaviour, (iii) the nature of competition in the market. Furthermore, the hypothesis of segmentation of health care market as presented in the theoretical chapter (see Chapter 2, sections 2.2.3 and 2.5) would lead us to expect that all these three aspects may be differentiated by income and location. This differentiation is expected to create segments of the market with distinct institutional characteristics, distinct behaviours on the supply and demand sides, and different competition patterns.

This chapter presents a small sample and qualitative exploration of this segmentation hypothesis as regards to pricing, analysing observed prices, and presenting qualitative evidence on supplier behaviour. Suppliers in the lower segment are expected to act more like price takers, facing fierce price competition, while suppliers in the upper segment are expected to be able to raise prices above the level of the lower segment because of the ability to compete partly on quality. This would indicate the existence of somewhat more market power in the upper segment than in poorer segments. In other words, price determination is expected to be closer to the competitive model in the lower segment and less price competitive in the upper segment (see Chapter 2, section 2.1.3).

On the supply side, this chapter assesses the evidence for price differentials, price trends and the main factors considered by facilities in setting prices by level, sector and location of health care facility. The price differentials have a direct impact on diversified financial capacity of
health care providers, which leads to the development of differentiated coping mechanisms by suppliers to deal with the current payment structure. Furthermore, differentiation in the financial capacity of health care providers brings about segmentation in terms of the institutional behaviour of suppliers, which in turn affects the magnitude and quality of services provided. Mackintosh and Tibandebage (2007: 83) argue that the lowest charging and hence lowest income health care providers often tend to provide poor quality services i.e. they turn to using under-skilled staff and medicines of doubtful quality. In this regard, there is a close relationship between the charging system, the provider’s income and the provision of good quality health care services (Gotsadze et al. 2005; Bennett et al. 1994). Chapters 6 and 7 examine this part of the argument further.

On the demand side, the pricing mechanism is influenced by level and distribution of livelihood assets and income (ability to pay) together with the overall protection mechanisms in place for financing health care services (See Figure 5.1). The current commercialised urban health care market operates in a highly competitive environment in the private sector and in the context of inadequate public provision that is also driven by ‘out of pocket’ payment structure i.e. a weak financing mechanism. In this context, the health care consumer faces the challenge of exclusion and access to decent health care services that vary by welfare levels. Therefore, on the demand side, this chapter examines the main sources of financing health care services, seeks to establish that better off consumers are indeed able to pay substantially higher sums than the poor for health care, and investigating the payment structure and the coping mechanism in place for different welfare levels. The adopted coping strategies explain how consumers, especially those from poor households, respond to the problems of market failure and poverty in order to access health care services.

5.2 Price Differentiation by Sector and Level of Health Care Facility

This section specifically analyses the pattern of pricing differential as influenced by sector and level of health care facilities. In this study, a basket of prices for various services was created to allow for comparison of prices charged by different health care providers, in terms of the level and sector of the health care facility. The basket of prices has been de-
rived from the list of standard treatment/services that was asked during the health care provider's interviews. The list of standard treatment/services comprised of selected items from the following four categories: registration and consultation, diagnostic tests, basic procedures, and drugs (See Appendix III, Section 6). Therefore, this section offers a detailed analysis of the prices charged by those health care providers interviewed, as shaped by the forces of market segmentation and competitive pressure.

5.2.1 Changing pattern of registration and consultation charges

This study shows that the pattern of charges is clearly changing, especially for registration and consultation charges as compared to the situation in the 1990s. The literature indicates that during the 1990s, health care facilities (especially private dispensaries) were commonly charging a registration fee for the first visit made to a particular health facility and a consultation fee for each visit made (Tibandebage and Mackintosh 2002). However, this study reveals that this trend is currently changing and these charges are falling out of favour, especially by private dispensaries and mainly those located in high-density areas. According to the facilities interviewed, the main reason for removing these charges is to enable these facilities to cope with high competitive pressure from other facilities in the area (including drug stores), and also be able to serve the poorer clientele. In other words, to increase affordability/access for the poor and therefore maintain their client share in the competitive market environment. However, this changing pattern was not observed in the higher-level private facilities (hospital/health centres) and the private dispensaries located in non-squatter areas. This changing pattern clearly indicates the impact of competitive pressure on the pricing decisions of facilities serving the very low income customers, and is an indication of the presence of market segmentation in the current urban health care system.

The analysis of the pricing structure for registration and consultation charges indicates clear existence of price differentials between level and sector of health care facilities. At the hospital level, private hospitals charge remarkably higher fees for these two components, compared to public hospitals and dispensaries (both private/public). However, at the dispensary level, private dispensaries (especially those located in the squatter area) tend to be less expensive in these two components (due to
the removal of these fees), as they try to cope with high competitive pressure. Therefore, at the dispensary level the charges for these two components have become relatively expensive for the poor in the public sector as compared to the private sector. This is because the public sector still maintains these two charges, consultation and registration fee. A detailed analysis of these findings is presented below.

(i) Registration charges

The results from this study indicate that due to high competitive pressure many private dispensaries removed registration charges. However, in private health centres and hospitals this charge remains. Interviews at private dispensaries indicate that even though they are struggling financially, they had to remove these charges to be able to compete and remain in the market. They indicate that the majority of the customers they serve are poor, with minimal (if any) savings and thus are struggling to finance their medical expenses. On the other hand, some pharmacies/drug stores are providing curative services illegally like any ordinary dispensary but again without charging the patients registration and/or consultation charges. As a result, their services have become cheaper (attracting many urban poor) and this poses stiff competition and hence financial constraints to the lower level facilities.

“It is hard to comment on this one. In general the prices are stagnant. It is difficult to increase prices, as people’s ability to pay is low. In some cases, we had to remove some charges such as registration fees, otherwise you will lose your customers to other health care providers” (Clinical Officer in Charge, not for profit dispensary, squatter area).

“In recent years we decided to remove the registration fees; this is because many private dispensaries around the area have removed these charges therefore we have to keep up with the competition” (Clinical Officer in Charge, private for profit dispensary, squatter area).

Furthermore, the results of this study indicate that the component of registration charges in private dispensaries is less than in public dispensaries. Table 5.1 indicates that the mean prices for registration in private dispensaries are lower than those at public dispensaries. This is mainly because most of the lower level, private facilities located in the squatter area have removed this charge and so it has lowered the average fee charged at this level. Among those private dispensaries that still charge the registration fee; their charges are no higher than those charged in
public dispensaries. Detailed information indicates that five out of the 14 health care facilities interviewed do not charge for registration. These five facilities were all private dispensaries located in the squatter area. In contrast to what is happening to the private sector, public health facilities are still charging a registration fee of 300 Tsh. across all levels. This makes the public sector relatively expensive for the poor, especially at the dispensary level, given that private dispensaries that are mainly serving the poor have removed these charges.

Table 5.1
Mean registration charges by sector and type of health facility

<table>
<thead>
<tr>
<th>Type of Health Facility</th>
<th>Government</th>
<th>Private Not for Profit</th>
<th>Private for Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>300</td>
<td>1000</td>
<td>2000</td>
</tr>
<tr>
<td>Health Centre</td>
<td>300</td>
<td>NA</td>
<td>1000</td>
</tr>
<tr>
<td>Dispensary</td>
<td>300</td>
<td>75</td>
<td>167</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 14
Source: Author’s Health Care Provider Interviews

(ii) Consultation fee

The results from this study indicate that consultation fees in private dispensaries are lower than in public dispensaries. However, at the hospital level, private hospitals charge very high consultation fees compared to public hospitals. It is indicated that most private dispensaries have removed the consultation fee (or only charge it in specific circumstances) in order to lower their cost per treatment and become more competitive in the market.

“The main challenge of operating a health care facility in this area is that the prices must be low. This is because people around this area are very poor. Besides that, we are also facing stiff competition from the nearby facilities and the drug stores to the extent that we have been forced to remove consultation charges. This has an impact on the quality of services we provide as the income of the facility is declining while the cost of running the facility is increasing everyday” (Clinical Officer in Charge, private for profit dispensary, squatter area).
“The prices have stagnated for a while now, competition is very high and the people we serve are poor. We have even tried to remove the consultation charges for those patients who spend money on other services for example, drugs and laboratory services. If we do not do this patients will not come to us, they will go to the drugs stores where they can purchase drugs without any diagnosis” (Clinical Officer in Charge, private for profit dispensary, squatter area).

The study indicates that four out of seven private dispensaries interviewed removed the consultation fee completely and all of these facilities are located in the squatter area. The remaining three private dispensaries were observed to charge a consultation fee of 500 Tsh. but only in situations where the patient did not need any diagnostic tests and/or purchased drugs from the facility. This is to say that when the patient has paid for other services the consultation fee is waived. In contrast to this, higher-level private facilities charged substantially for consultation services, for both the specialist and non-specialist. For private hospitals and health centres, the average consultation fee for a non-specialist is 1,750 Tsh, while that of a specialist is 4,500 Tsh.

For government facilities, the arrangement for consultation fees is quite different. All government facilities (across all levels) charged a consultation fee of 300 Tsh (for non-specialist and specialist if applicable). Unlike the private sector where the consultation fee is per consultation, in public facilities this fee is valid for a period of one week regardless of the number of times a patient goes back to the facility. In addition, this fee is also applicable only to those patients who are not under the exemption system.

5.2.2 Price differential on diagnostic tests

The comparative analysis of prices for common diagnostic tests also indicates the existence of price differentials by sector and level of health care facility. At the hospital level, the price differences between the public and private sector appear greater than at the dispensary level. The selected tests used for the purpose of this analysis include blood test for malaria parasite (MPS), blood test for haemoglobin (HB), urine test routine, and stool test routine.
Table 5.2
*Hospital level: Prices for common diagnostic tests, by sector*

<table>
<thead>
<tr>
<th>Test</th>
<th>Government</th>
<th>Private Not for Profit</th>
<th>Private for Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood MPS</td>
<td>300</td>
<td>1000</td>
<td>1000</td>
</tr>
<tr>
<td>Blood HB</td>
<td>500</td>
<td>2000</td>
<td>2000</td>
</tr>
<tr>
<td>Urine Routine</td>
<td>500</td>
<td>1500</td>
<td>1000</td>
</tr>
<tr>
<td>Stool Routine</td>
<td>300</td>
<td>1500</td>
<td>1000</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 3 Hospitals
Source: Author’s Health Care Provider Interviews

Table 5.2 indicates the overall prices charged by public hospitals are low compared to the prices charged by private hospitals. For example, public hospitals charge 300 Tsh for a blood MPS test, while the same test is 1,000 Tsh at private hospitals. When comparing the prices for common diagnostic tests as charged by the private for profit hospital to the prices charged by the private not-for-profit hospital the difference is small. In some cases, the prices charged by the private-not-for-profit hospital are higher (See Table 5.2). Furthermore, when comparing prices for common diagnostic tests at the dispensary level by sector, one observes that overall the mean prices charged by public dispensaries are consistently lower than those charged by private dispensaries (See Table 5.3).

Table 5.3
*Dispensary level: Mean prices for common diagnostic tests by sector*

<table>
<thead>
<tr>
<th>Test</th>
<th>Government</th>
<th>Private Not for Profit</th>
<th>Private for Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood MPS</td>
<td>300</td>
<td>500</td>
<td>433</td>
</tr>
<tr>
<td>Blood HB</td>
<td>300</td>
<td>600</td>
<td>500</td>
</tr>
<tr>
<td>Urine Routine</td>
<td>300</td>
<td>425</td>
<td>600</td>
</tr>
<tr>
<td>Stool Routine</td>
<td>300</td>
<td>425</td>
<td>433</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 9, 2 government, 2 private not-for-profit, 5 private for-profit
Source: Author’s Health Care Provider Interviews
5.2.3 Price differential on standard procedures

The study also asked for prices for a set of standard procedures commonly available in health care facilities. When comparing prices for common procedures at the hospital level one observes that the prices offered by public hospitals are consistently very low compared to the prices offered by private hospitals (See Table 5.4). For example, the price for circumcision is 2,000 Tsh in the public hospital, while in the private hospitals it is about 20,000 to 25,000 Tsh. In principle, the charges for all procedures associated with childbirth are exempt in the public sector and therefore a patient is not required to pay anything. In contrast to the public sector, prices associated with childbirth in the private sector are extremely high, especially for lower income people to afford. In private hospitals, the price for normal childbirth is about 60,000 Tsh, while a caesarean section ranges from 150,000 to 250,000 Tsh (See Table 5.4).

Table 5.4
Hospital level: Prices for common procedures by sector

<table>
<thead>
<tr>
<th>Common Procedures</th>
<th>Government Hospital</th>
<th>Private Not for Profit Hospital</th>
<th>Private for Profit Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incision and Drainage</td>
<td>1 500</td>
<td>4 000</td>
<td>6 000</td>
</tr>
<tr>
<td>Normal Childbirth</td>
<td>0</td>
<td>60 000</td>
<td>60 000</td>
</tr>
<tr>
<td>Circumcision</td>
<td>2 000</td>
<td>20 000</td>
<td>25 000</td>
</tr>
<tr>
<td>Caesarean section</td>
<td>0</td>
<td>250 000</td>
<td>150 000</td>
</tr>
<tr>
<td>Appendectomy</td>
<td>3 000</td>
<td>200 000</td>
<td>120 000</td>
</tr>
<tr>
<td>Evacuation (dilatation and curettage)</td>
<td>3 000</td>
<td>30 000</td>
<td>40 000</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 3 hospitals
Source: Author’s Health Care Provider Interviews

Information from the exit patient interviews indicate that even though the charges associated with childbirth have been removed in public health care facilities, in some cases patients are still incurring expenses in terms of payment for necessary supplies (e.g. cotton, wool, gloves, etc.) and for appreciation (in terms of cash) given to the nurses who attended the patient.
To deliver this baby I have not paid anything, everything was free. It is known to all pregnant mothers from the MCH clinic that when we come to deliver our babies the charges are free. However I was asked to pay for the necessary supplies (e.g. cotton wool) and this has cost 6,000 Tsh.” (Female, 29 years old, exit patient interview, public health centre).

“I gave some money to the health care workers who assisted me in the delivery of the baby. I was not asked to do it but I thought I should give them asante (thank you)” (Female, 29 years old, exit patient interview, public health centre).

The prices for common procedures at public dispensaries remain cheaper than the prices offered by private dispensaries. However, in some cases the difference in prices between these two sectors at this level can be very small. For example, Table 5.5 indicates that the mean price for incision and drainage in public dispensaries is 1500 Tsh whereas it is 1667 Tsh in the private not-for-profit dispensaries. Furthermore, the private dispensary located in non-squatter area was observed to charge higher prices for common procedures as compared to prices charged by the private dispensaries located in squatter areas. For example the cost for incision and drainage procedure was recorded to be 3500 Tsh at the private dispensary located in non squatter area whereas it is 1500Tsh at the illegal operational private dispensary located in the squatter area.

Table 5.5
Dispensary level: Mean prices for common procedures

<table>
<thead>
<tr>
<th>Common Procedures</th>
<th>Government</th>
<th>Private Not for Profit</th>
<th>Private for Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incision and drainage</td>
<td>1 500</td>
<td>3 250</td>
<td>1 667</td>
</tr>
<tr>
<td>Normal Child Birth</td>
<td>0</td>
<td>10 000</td>
<td>17 000</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 9, 2 government, 2 private not-for profit, 5 private for profit
Source: Author’s Health Care Provider Interviews

5.2.4 Price differential on drugs for specified treatment

The comparative analysis on drug prices based on specified protocols of treatment also indicates differences in sector and level of health care facility. For comparability purposes, this study specified particular proto-
cols of treatment for specific diagnosed illnesses as specified in Tables 5.6 and 5.7 (See Appendix III, Health Care Providers Questionnaire). Table 5.6 indicates that the prices of drugs for the specified protocols of treatment are high at private hospitals when compared to public hospitals. There are also no pronounced differences in prices between the private for-profit and private not-for-profit hospital. In some cases, the prices in the private not-for-profit hospital are higher than the prices in the private for-profit hospital. For example, prices for treatment of malaria (adult) and uncomplicated pneumonia (adult). In general, the prices at private hospitals remain high compared to public hospitals and this provides an explanation for the limited utilisation by the poor at this level of care (See Chapter 4, Section 4.4.2).

Table 5.6

<table>
<thead>
<tr>
<th>Illness</th>
<th>Protocol of Treatment</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Government</td>
</tr>
<tr>
<td>Malaria (Adult)</td>
<td>Sulphadoxin Pyrimetamine (SP) – (Adult 60 kg)</td>
<td>309</td>
</tr>
<tr>
<td>Dysentery (Adult)</td>
<td>Erythromycin (Adult 60 kg)</td>
<td>1 009</td>
</tr>
<tr>
<td>Uncomplicated Pneumonia (Adult)</td>
<td>Amoxicillin (Adult 60 kg)</td>
<td>1 009</td>
</tr>
<tr>
<td>Intestinal Worms (Adult)</td>
<td>Mebendazole tablets 100mg for three days (Adult 60 kg)</td>
<td>109</td>
</tr>
<tr>
<td>Malaria (Child)</td>
<td>Sulphadoxin Pyrimetamine (SP) – tablets (Child 15 kg)</td>
<td>0</td>
</tr>
<tr>
<td>Uncomplicated Pneumonia (Child)</td>
<td>Amoxicillin Syrup (Child 15 kg)</td>
<td>0</td>
</tr>
<tr>
<td>Dysentery (Child)</td>
<td>Erythromycin Syrup (Child 15 kg)</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 3 hospitals  
Source: Author’s Health Care Provider Interviews

The prices of drugs for specified protocols of treatment at the dispensary level also vary by sector of the health care facility. Prices for drugs at the public dispensaries are cheaper than the prices at private dispensaries (See Table 5.7). In the public facilities, children under five are also supposed to benefit from free drugs, see prices for treatment of malaria and dysentery for children. However, the main challenge has been on the
availability of these free medications. This problem created a shift in utilisation of health care services for children under five (especially those from poor families) from public to private dispensaries (See Chapter 4, Section 4.3.5 and Chapter 6, Section 6.1.1). Furthermore, the prices of drugs for the specified protocols of treatment in most cases were observed to be higher in the private dispensary located in low-density area compared to the private dispensaries located in squatter areas. For example prices for treatment of malaria (adult) was 2000Tsh in the private dispensary located in non-squatter area whereas it ranges between 300 - 900 Tsh in most private dispensaries located in squatter areas.

### Table 5.7
Dispensary level: Mean prices for specified treatment of selected infectious illnesses, by sector

<table>
<thead>
<tr>
<th>Illness</th>
<th>Protocol of Treatment</th>
<th>Government</th>
<th>Private Not for Profit</th>
<th>Private for Profit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaria (Adult)</td>
<td>Sulphadoxin Pyrimethamine (SP) – (Adult 60 kg)</td>
<td>300</td>
<td>650</td>
<td>1 100</td>
</tr>
<tr>
<td>Dysentery (Adult)</td>
<td>Erythromycin (Adult 60 kg)</td>
<td>1 000</td>
<td>1 675</td>
<td>1 750</td>
</tr>
<tr>
<td>Uncomplicated Pneumonia (Adult)</td>
<td>Amoxicillin (Adult 60 kg)</td>
<td>1250</td>
<td>1 425</td>
<td>1 500</td>
</tr>
<tr>
<td>Intestinal Worms (Adult)</td>
<td>Mebendazole tablets 100mg for three days (Adult 60 kg)</td>
<td>150</td>
<td>467</td>
<td>467</td>
</tr>
<tr>
<td>Malaria (Child)</td>
<td>Sulphadoxin Pyrimethamine (SP) – tablets (Child 15 kg)</td>
<td>0</td>
<td>350</td>
<td>533</td>
</tr>
<tr>
<td>Uncomplicated Pneumonia (Child)</td>
<td>Amoxicillin Syrup (Child 15 kg)</td>
<td>0</td>
<td>1 250</td>
<td>1 500</td>
</tr>
<tr>
<td>Dysentery (Child)</td>
<td>Erythromycin Syrup (Child 15 kg)</td>
<td>0</td>
<td>1 333</td>
<td>1 850</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 9, 2 government, 2 private not-for-profit, 5 private for profit
Source: Author’s Health Care Provider Interviews

5.2.5 Simple average summary on selected prices: By level, sector and location of the facility

Table 5.8 presents a simple average summary of selected prices for drugs, diagnosis tests and basic procedures for all 14 facilities covered in the health care provider interviews. This simple average summary has been calculated by taking the average prices on the following selected items in each of the health care facilities studied: Blood for MPS test, stool test
routine, urine test routine, Blood HB test, SP drugs (adult dose), Mebenda- 
zol drug (adult dose), Amoxicillin (adult dose) and incision and drain-
age. Overall, the public health care facilities are less expensive than the 
private sector. The private sector, and particularly the private hospitals, 
has the highest charges compared to any health care facilities. However, 
there are some exceptions in this pattern of average prices. The unregis-
tered/informal private dispensary located in the squatter area has lower 
prices like those charged in public health care facilities. This facility man-
ages to charge lower prices because it is operating illegally and therefore 
keeps very low operational costs (See Chapter 7, Section 7.3.2). Further-
more, the Catholic dispensary located in the squatter area also appears to 
have lower prices when compared to other private dispensaries in the 
squatter area. However, this dispensary does not offer deferred payments 
or fee reduction/removal on registration and consultation charges. This 
hinders the poor in accessing its comparatively good quality services (See 
Chapter 7, Section 7.3.3).

<table>
<thead>
<tr>
<th>Level</th>
<th>Sector</th>
<th>Location</th>
<th>Simple Average</th>
<th>Deferment of Payment</th>
<th>Fee Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensary</td>
<td>Public</td>
<td>Medium Density</td>
<td>450</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private/Unregistered</td>
<td>Squatter</td>
<td>563</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Hospital</td>
<td>Public</td>
<td>Medium Density</td>
<td>563</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private/Catholic</td>
<td>Squatter</td>
<td>625</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Public</td>
<td>Squatter</td>
<td>650</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private</td>
<td>Squatter</td>
<td>831</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private</td>
<td>Medium Density</td>
<td>875</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private</td>
<td>Squatter</td>
<td>944</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Health Centre</td>
<td>Public</td>
<td>Medium Density</td>
<td>950</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private</td>
<td>Squatter</td>
<td>1,263</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Health Centre</td>
<td>Private</td>
<td>Low Density</td>
<td>1,325</td>
<td>No</td>
<td>Yes*</td>
</tr>
<tr>
<td>Dispensary</td>
<td>Private</td>
<td>Low Density</td>
<td>1,500</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hospital</td>
<td>Private</td>
<td>Low Density</td>
<td>1,731</td>
<td>No</td>
<td>Yes*</td>
</tr>
<tr>
<td>Hospital</td>
<td>Private</td>
<td>Medium Density</td>
<td>1,988</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

Notes: Number of Health Care Facilities: 14, * = Not common practice (see section 5.5 - fee reduction) 
Source: Author’s Health Care Provider Interviews
On the other hand, the private dispensary located in the low-density area indicates that it has higher prices compared to other private dispensaries located in the squatter area. This is because this dispensary also serves individuals from better-off households who have a higher ability to finance health care services as compared to the majority of the poor who utilise the private dispensaries located in the squatter area. This facility also does not practice deferment of payment or fee reduction on registration and consultation, which also indicates that its clientele has ability to finance health care services (See Section 5.5).

5.3 Diverse Opinions on Price Trends and Price Setting by Sector

All facilities must decide on prices to set, but it is expected that facilities in high-density areas will feel more constrained by market pressure to match competitors’ prices, while facilities serving the better off clients may experience a little more scope to set their preferred price level. In the interviews, there are diverse opinions on the price trends across facilities of different levels, sector and area. The results indicate that overall there is stagnation of prices in public health care facilities. However, in the private health care facilities there are two distinct patterns. The suppliers in the lower segment (private dispensaries located in squatter areas serving the poorer community) are facing fierce price competition and this keeps their prices low. Whereas there has been an increasing trend in prices in the upper segment of the market, i.e. private hospitals and dispensaries located in non-squatter areas serving the majority better off clientele. The following are the main observations from the health care providers interviewed regarding their opinion on price trends in the area where their facilities are located:

Stagnation of prices in public health care facilities

All four public health care facilities interviewed shared the same opinion that there is rigidity in the change in prices of the public health care facilities. The price review process takes a while to conduct and implement.

“The prices of drugs should be half the price of drugs as charged by the Medical Stores Department (MSD). However, price changes are not done frequently” (Hospital secretary, municipal hospital).
“In public dispensaries, the prices are low and stagnant” (Clinical Officer in Charge, public dispensary, non-squatter area).

“There is increasing trend of prices in the private health care facilities, but the situation is a bit rigid in the public health care facilities” (Clinical Officer in Charge, public dispensary, squatter area).

“Our prices are lower than the private sector. We usually remain stagnant for a while, changes are done occasionally” (Medical Officer in Charge, public health centre).

**Increasing prices for private hospitals and private dispensaries located in non-squatter areas**

Those in charge of private hospitals interviewed were all of the opinion that there have been increasing prices in recent years due to an increase in the cost of drugs and other costs of running the health care facilities. This opinion was also shared by private dispensaries located in non-squatter area.

“Prices are increasing as the cost of running the facilities are also increasing. The costs have increased on salaries, water, electricity and taxes for example, we pay tax 1.8 million per month” (Medical Officer in Charge, private hospital).

“The prices are increasing due to increased cost of operation” (Assistant Medical Officer in Charge, private for profit dispensary, non-squatter area).

“Price trend is increasing; due to increased running cost during power shortage, we use generator and also prices of drugs have gone up” (Clinical Officer in Charge, private not for profit hospital).

**Competitive pressure and poverty keeps prices down in private dispensaries located in squatter areas**

Those in charge of private dispensaries in the squatter area all shared the same opinion that the prices they offer have been stagnant despite an increase in the cost of running their facilities. They argue that they face stiff competition amongst themselves and the drug stores, and the people they serve are too poor to afford any price increases. In this regard, they are forced to look for other ways to keep their prices as low as possible so as they can survive in the market (See also qualitative informa-
tion in Section 5.2.1). The aspect of coping strategies for these facilities has been explained in depth in the later section (See Section 5.5).

5.3.1 Factors considered in setting prices by sector

Private health care facilities are more flexible in setting prices for the services they provide as compared to public health care facilities. The following is detailed information regarding the factors and indicators used in setting prices in health care facilities across these two sectors.

Public Sector

Those in charge of public health care facilities do not play a direct role in setting prices at the facility level. The municipality is responsible for the pricing process, which is also supposed to involve the heads of the health care facilities. However, all those in charge of the health care facilities interviewed indicated that their involvement in the overall pricing process is minimal. The findings reveal that the public sector is very rigid in making changes in the prices offered by public health care facilities. This is because pricing of public health care services is regarded to be a very sensitive issue in the national welfare and therefore it can easily be associated with political issues.

“The prices in the public sector are low and stagnant; the public facilities receive directives from municipal level on the pricing structure including who/how much to charge for the services; we have no direct influence in determining these prices. Those in-charge of the health care facilities meets with the municipal officials at least four times a year, among others to discuss issues around revenues, charges and services provided. But in most cases, our input/role is very minimal. It is also very hard to increase prices for public health care service as this can easily become a political issue” (Medical Officer in Charge, public health centre).

Private Sector

The private sector is more flexible in setting prices for services offered in private health care facilities. The private health care facilities interviewed acknowledged that in setting prices, they take into account the following key factors: location of the facility, clients’ ability to pay, prices of other providers, cost of running the health care facility (utilities and salaries), cost of drugs and other medical supplies, and mode of payment of the customers (cash, Insurance etc).
“We do take into account prices charged by other facilities and drug stores and also patients’ ability to pay.” (Clinical Officer in Charge, private for profit dispensary, squatter area).

“We have to understand the people that we provide them with our services and try to analyse their ability to pay; this is done through close interaction with patients.” (Clinical Officer in Charge, private not for profit dispensary, squatter area).

“In setting our prices we have to analyse the cost and expenditure components, ability to pay; we also look at the percentage of our customers covered by the insurance” (Clinical Officer in Charge, private health centre, low density area)

5.4 Bifurcation in the Payment Structure: Demand Side

The pricing mechanism of health care services is analysed from the supply and demand sides of the health care market. The demand side influences the pricing process mainly through the ability of individuals to finance health care services across different welfare levels (See Figure 5.1). The ability of individuals to finance health care services is influenced by the level of livelihood assets, income and the overall structure of financing care including protection mechanisms for the poor. The current payment system is dominated by an out of pocket payment structure including the fragmented risk pooling financing mechanisms (See Chapter 1, Section 1.3.3). In this regard, this section analyses the bifurcation of the payment structure by taking into account the three main components on the demand side: main sources of financing health care services by social class; the pattern of expenditure on health care services; and coping strategies for the out of pocket payment system.

5.4.1 Main sources of financing care by social class

The main source of financing health care services at the household level largely remains to be from the resources coming from within the household level through the out of pocket payment structure. The information from the household survey reveals that out of all the visits made to health care providers, 80 per cent were financed from resources within the household level through out of pocket payments. The out of pocket payment through the resources at household level is observed to domi-
nate across all the welfare groups with higher rates coming from poorer and middle level households (See Table 5.9).

**Table 5.9**

*Source of payment for visits to health care providers, by asset level*

<table>
<thead>
<tr>
<th>Payer</th>
<th>poorer</th>
<th>middle</th>
<th>better</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH Member</td>
<td>5137</td>
<td>4083</td>
<td>1717</td>
<td>10937</td>
</tr>
<tr>
<td>Other Relatives</td>
<td>82</td>
<td>83</td>
<td>70</td>
<td>80</td>
</tr>
<tr>
<td>Neighbour</td>
<td>66</td>
<td>0</td>
<td>0</td>
<td>66</td>
</tr>
<tr>
<td>Insurance</td>
<td>8</td>
<td>25</td>
<td>77</td>
<td>110</td>
</tr>
<tr>
<td>Employer</td>
<td>369</td>
<td>543</td>
<td>554</td>
<td>1466</td>
</tr>
<tr>
<td>Exemption</td>
<td>571</td>
<td>218</td>
<td>84</td>
<td>873</td>
</tr>
<tr>
<td>Total</td>
<td>6229</td>
<td>4931</td>
<td>2456</td>
<td>13615</td>
</tr>
</tbody>
</table>

Key: Weighted counts  
Column percentages (Italic, Bold)  
Number of Observations = 528

Source: Author’s Household Survey Data

Overall, payments through employers and other arrangements play a minimal role in financing health care services at the household level. The data also shows that the health insurance sector is still under-developed and therefore very few individuals are benefitting from health insurance arrangements, mainly better-off households (See Table 5.9). However, analysis by welfare level indicates that employers play a substantial role in financing health care services especially for better-off households as compared to middle/poor households. Table 5.9 indicates that employers financed 23 per cent of visits by individuals from better-off households to health care providers. This rate is much lower for middle and poor households, 11 per cent and six per cent respectively. The exemption system also has a minimal role in financing health care services.
Nevertheless, among the few individuals who are benefiting from this process, individuals from poorer households are included. Table 5.9 indicates that out of all the visits made by poor households, in about nine per cent of all cases the cost of the health care services was financed through the exemption system.

The above findings are also supported by the information obtained from the exit patients interviews (See Table 5.10). Out of 140 exit patients interviewed, 87 per cent financed their medical expenses through out of pocket arrangements from resources at the household level. Only 13 per cent of all the 140 cases had their health care bills financed through other arrangements, and these cases were predominantly from higher-level private facilities and from facilities located in better-off areas.

<table>
<thead>
<tr>
<th>Source</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household/Out of Pocket</td>
<td>122</td>
<td>87</td>
</tr>
<tr>
<td>Other sources</td>
<td>18</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>100</td>
</tr>
</tbody>
</table>

*Table 5.10
Exit patients: Main source of payment*

Notes: 140 Exit Patients Interviewed
Source: Author’s Exit Patient Interviews

5.4.2 Health expenditure by social class

The expenditure for health care services is highly influenced by the ability of the user to finance health care, given that the main source of financing health care is from household resources. Individuals from different welfare levels and/or spatial location indicate a distinct level of expenditures for utilisation of their health care services. Chapter 4 (Section 4.3.2), shows that individuals from better-off households utilise more services from relatively expensive private hospitals compared to other sources of health care services (See also Section 5.2). Therefore, the findings from this section justify this phenomenon, as the expenditure on health care for individuals from better-off households remain high compared to individuals from middle/poor households who mostly utilise services at the dispensary level (Table 5.11).
Table 5.11
Five number summary: Payments per visit, by asset level

<table>
<thead>
<tr>
<th>Five Number Summaries</th>
<th>Minimum</th>
<th>Lower Quartile</th>
<th>Median</th>
<th>Upper Quartile</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better-Off HH</td>
<td>0</td>
<td>3,750</td>
<td>8,000</td>
<td>17,750</td>
<td>626,000</td>
</tr>
<tr>
<td>Middle level HH</td>
<td>0</td>
<td>2,000</td>
<td>3,500</td>
<td>6,000</td>
<td>80,000</td>
</tr>
<tr>
<td>Poorer HH</td>
<td>0</td>
<td>1,500</td>
<td>3,000</td>
<td>5,000</td>
<td>55,000</td>
</tr>
</tbody>
</table>

(b) Non-parametric test for differences between medians

<table>
<thead>
<tr>
<th>(Strictly) greater than the median</th>
<th>Poorer HH</th>
<th>Middle-level HH</th>
<th>Better-off HH</th>
<th>Row totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>118</td>
<td>101</td>
<td>21</td>
<td>240</td>
</tr>
<tr>
<td>Yes</td>
<td>73</td>
<td>86</td>
<td>63</td>
<td>222</td>
</tr>
<tr>
<td>Column totals</td>
<td>191</td>
<td>187</td>
<td>84</td>
<td>462</td>
</tr>
</tbody>
</table>

Pearson chi-square (2) = 32.12 Probability value = 0.000

Source: Author’s HH survey data

Table 5.11 indicates that, for the total sample, there are larger differences between the expenditures made per visit to health care providers by individuals from better-off households and those from middle/poor households. The median test – a chi-square test that tests for differences in medians between groupings – confirms that the medians for different assets levels (particularly, between the better-off households and the middle/poorer households) are significantly different from one another. For example, for expenditures made per visit by individuals from better-off households, the maximum payment per visit was 626,000 Tsh, whereas for individuals coming from poorer households the maximum payment was only 55,000 Tsh. Furthermore, the median payment per visit is about 8,000 Tsh for individuals from better-off households and only 3,000 Tsh for individuals coming from poor households. The data also indicates that there is little difference between the expenditure per visit between the poorer and the middle strata (See Table 5.11). However, these payments per visit for the poorer/middle households remain high given their standard of living, asset base and income levels.
Not surprisingly, given the skewed nature of the data, there are also substantial differences in the mean payments per visit for individuals coming from households of different welfare levels. Figure 5.2, which also differentiates by spatial location, indicates that individuals from better-off households and particularly those located in non-squatter areas have the highest mean payment per visit as compared to individuals from other welfare levels. This finding can be explained by the fact that the majority of individuals from better-off households utilise predominantly health care services at private hospitals, where the charges are more expensive compared to other health care facilities (See Section 5.2 and Chapter 4, Section 4.3.2). The poor have the lowest mean payment per visit. There is also little difference in the mean payment per visit by individuals from the poor households located in the squatter areas compared to the poor located in non-squatter areas. Nevertheless, on average, a poor person is required to have about 4052-4269 Tsh in order to access
health care services. This is quite a significant amount of money for the poor given their low welfare level (See Figure 5.2).

5.4.3 How do the poor cope with the ‘out of pocket’ payment system?

One of the important questions to ask is how the poor cope with the current system of financing health care. The main source of financing health care services is through out of pocket payments, which is a challenge for the poor given their low level of income. Furthermore, the results from Chapter 3 reveal that none of the poor households interviewed have a bank account (implying a low savings capacity) and they lack the ability to borrow from other social networks in case of emergency (See Section 3.7.3). Given these circumstances, the poor developed various strategies that can be of help when they face the unforeseen health care needs. This section summarises the qualitative information (from household interviews) indicating the main methods used by the poor to cope with out of pocket payments.

(i) Request for salary advance

The employed poor (formal/informal) are sometimes forced to request a salary advance in order to finance health care bills.

“My husband is the one who always pays the medical bills in case there is a need to go to the hospital. But it is too expensive for him compared to the salary he earns at the end of the month. Sometimes he asks for an advance of his next salary in order to clear the bill” (Female, 30 years, squatter area).

(ii) Request for assistance from other close relatives and friends

In some incidents, the poor are forced to request financial assistance from their close relatives and neighbours in order to finance medical expenses. The data on Table 5.8 support this statement. Of all the visits made by individuals from poor households, for about 1.3 per cent the source of payment was from close relatives and 1.1 per cent from neighbours.

“When I was suffering from malaria, I did not have the money hence my brother had to come and take me to the hospital and he paid the bill. My chronic illness has not been treated either due to lack of money; I have
failed to pay for further investigations required” (Female, 60 years old, squatter area).

“The cost of medication was fair but I did not have the money. My neighbour had to assist the family by giving us 5000 Tsh.” (Male, 67 years old, squatter area).

(iii) Use of business capital to finance care

In some cases the poor are forced to use their relatively (small) business capital in order to finance health care services.

“My wife has spent part of the capital for her small business (retail shop) to finance my health problems—if we continue in this way the shop can close down.” (Male, 55 years old, squatter area).

(iv) Forced to compromise expenditure on other basic needs

In some cases, the poor have to spend a large part of their (small) salaries on medical bills and thus compromise expenditure on other basic needs.

“I was able to pay the medical bills, but it was very expensive compared to the income I earn per month. Hence, I have almost spent my one month’s salary on medical bills—but other important expenditures are still waiting for me to sort them out such as house rent, food, etc.” (Male, 43 years old, squatter area).

“The cost was very expensive in all episodes. Most of the time, when someone is sick, we have to minimise our daily spending on food so that we can be able to go to the health care facility and have the money to pay for the bills” (Male, 32 years old, squatter area).

(v) Use all/part of their small family savings

The few poor individuals who have some savings are sometimes forced to spend a large part of it (if not all) to finance their health care bills.

“For the case of our son’s illness, the payments for drugs and consultation fees were too high, but luckily, my wife had some savings, which she used to pay the bill at that time, but she spent all of it and was left with no savings.” (Male, 45 years old, squatter area).

“The amount of money I spent on medical bills was too much for me. It left me with no savings at all.” (Female, 38 years old, non-squatter area).
(vi) Accumulate debt through deferment of payment

In some cases, the poor develop mutual relationships with the health care providers, especially the private dispensaries, and can defer their medical bills promising to pay later. This practice is convenient especially for the poor but it ties them to debt and also reduces their flexibility of choosing the health care facilities that could be providing higher quality care (See also Section 5.5).

“The nearby private dispensary always allows us to defer payments. We have now deferred payments for many illness episodes. I think we have accumulated a debt of about 65,000 Tsh and we have not been able to pay it yet” (Male 62 years old, squatter area).

(vii) Abstain from/postpone treatment

In some cases, the poor are forced to postpone and/or abstain from receiving the required health care treatment until they secure the funds (See also Chapter 4, Section 4.4.1).

“The cost was very expensive. Now I’m still sick but I cannot afford to go back to the health care facility because I don’t have money.” (Male, 35 years old, squatter area).

(viii) Prioritising household members in receiving health care services

In some cases, the poor are forced to prioritise ill household members on seeking health care services given their limited resources. This is because in some situations they cannot afford to take all the ill members at once to consult a health care provider. For example, in some situations they would prefer to take children for better quality care while the adults wait for cheaper alternatives.

“For children we have no choice but to take them to the health care facility, but for us adults when we get sick we just buy drugs from the pharmacy to cut down the medical costs” (Female, 36 years old, squatter area).

“The two of us did not go to the health care facility, because it is expensive. We bought drugs from the pharmacy. It is difficult to afford health care services for the whole family. We are trying to make sure that at least the children are taken to the hospital when they are sick. Sometimes for us adults we just buy drugs at the pharmacy to cut down on costs.” (Male, 40 years old, squatter area).
(ix) **Wait and see until the case is an emergency**  
Some of the respondents revealed that when someone in their household falls ill they do not rush to consult the health care provider, but wait until the case is severe. This behaviour can be dangerous especially when small children are involved as they can be taken to the hospital when the condition is just too bad, if not late.

“We only go to the hospital when we really see it is a severe case, otherwise the cost of care and the time involved to access the services is too much” (Female, 38 years old, squatter area).

(x) **Forced to undertake partial treatment**  
This study also indicates that sometimes the poor have to undertake partial treatment, as they cannot afford to pay the full cost of treatment.

“The cost of medicine is just too high—when the doctor prescribes drugs, we either purchase half of the dose or buy them in small quantities, sometimes not according to the dosage prescribed.” (Female, 52 years old, squatter area).

5.5 **Supply Side: Coping with Bifurcated Payment Structure**  
Suppliers in this market face a challenge if they seek to provide adequate and quality health care services, since many struggle for financial viability because of the low ability of users to finance care and the very low coverage of the existing insurance system. This section provides further evidence that in the lower segment of the health care market serving the majority poor, the facilities are struggling with financial pressure and facing difficulty in effectively charging the prices they set. Chapter 6 and 7 investigate the consequences for quality of this weight given to price in the lower segment. In the upper segment facilities can try to raise prices both by giving relatively more weight to quality (see also chapter 7, sections 7.3 and 7.4) and by some less legitimate pricing behaviour discussed below. In other words, the pricing and payment problems bring about an unstable financial situation especially in the lower segment; this has a direct impact on the facilities’ institutional behaviour in terms of the quality of service provided and the operation of other managerial functions of health care facilities (analysis of this is covered in chapters 6 and 7). As explained earlier, the current payment structure largely re-
quires users of health care services to have cash on hand at the time of seeking health care services. This payment structure poses a significant challenge to the providers of health care services, taking into account that many users of health care services come from poorer and middle strata households and are therefore struggling to cope with this payment system. Furthermore, the private providers (especially private dispensaries in high and medium density areas) also face stiff competition amongst themselves and as a result, they are struggling to stay in the market.

This section analyses, from the supplier’s perspective, how they cope with the existing payment structure given the low ability of users to finance health care services and in the highly competitive market environment. Health care service providers, especially the private dispensaries, have to survive in a highly competitive market while providing services to low income level clientele, who mostly finance care through out of pocket payments. In order to cope with this challenge, the health care service providers have developed diversified coping strategies to help them survive in the current market. These coping strategies include deferment of payment, fee reduction, overpricing and abuse of the insurance system. The following is an in-depth explanation of the adopted coping mechanisms and their differentiation between the lower and upper segments of the market.

(i) Deferment of payment

This mode of payment is mainly practised by private dispensaries located in squatter areas (See Table 5.8). In this arrangement, the users and providers of health care services develop a mutual understanding in financing health care services. The users are mainly poor with limited (if any) savings and in most cases live near the health care facility. The health care providers who take part in this arrangement are mainly those who experience financial pressure caused by high competition, especially from neighbouring dispensaries and drug stores.

In this arrangement, the users and providers depend on each other to survive in the market. The suppliers are forced to enter into this arrangement with the main intention of retaining its client share in the market. On the other side, the users of health care services are willing to forgo the flexibility of choosing the provider of their choice. In this case, they are willing to enter into this arrangement in return for the ability
and flexibility to access health care services in time of need. The information from health care provider interviews reveals that all the private dispensaries interviewed were engaged in the deferment of payment practice with the exception of the private dispensary located in the better-off area and the Catholic dispensary located in the squatter area (See also Table 5.8 and Chapter 7, Section 7.3.2). This system enables health care providers to maintain their regular customers.

“This is a very normal practice and it is happening almost every day; and it is also important for our survival to keep our customers. We know most of the people we serve, so when they do not have enough money we allow them to bring the money later.” (In Charge, private dispensary for profit, squatter area).

“This is a very common practice especially for our regular customers; we even have a register book for that purpose. The patient has to explain his/her problem at reception and then the in-charge makes the decision whether the payment will be sorted out in future.” (In Charge, private dispensary for profit, squatter area).

“This is a normal practice. We know our patients; they come from around the area. We have a registry book specifically for that purpose. In the last seven days, nine patients have come to complete their payments and six have requested to be treated on credit. The officer in charge usually decides on whether to provide credit or not.” (In Charge, private dispensary not for profit, squatter area).

The data also shows that the upper level of private health care provision (i.e. private hospitals/health centres) does not practice this payment system. This is because the private hospitals/health centres mainly serve the better-off who in most cases are comfortable in financing their health care expenses. However, it is also difficult to set up this payment system at this level, as the customers they serve are many and coming from different geographical locations. Therefore, it is not easy to establish these informal relationships and follow up on payment once the customer has received medical services.

“We do not have any system in place that allows us to defer payments, patients are required to pay cash or be covered by the health insurance.” (In Charge, private for profit health centre, non-squatter area).
“We do not have this policy...all payments must be done in cash at the time a patient is receiving the services.” (In Charge, private dispensary for profit, non-squatter area).

“We do not allow people to defer payment; it is just not proper; how would you trace them?” (In Charge, private not for profit hospital)

Payment deferment remains uncommon in public health care facilities. On rare occasions, public facilities have to accept this mode of payment especially for inpatients. This happens when a patient claims not to have the money after they already received the service. Unfortunately, in most cases, they do not bring back the money and it is hard for public facilities to trace these patients and follow up on their bill.

“The deferment of payment is mainly happening for the admitted patients; some of them after the discharge they claim not to have money...the relatives promise to bring the money later; but usually you do not see them again. For the Out Patient Department (OPD) this is not allowed (if it is not an emergency) someone will be given the services equivalent to the money that she/he has. Then she/he will be referred to the welfare office. If accepted, she/he will be exempted for the remainder of the bill; and be given a pink card (to indicate it is a temporary exemption)” (Health Secretary, municipal hospital).

(ii) Fee reduction

In some cases, the health care providers must reduce fees for their patients. Half (seven) the health care providers interviewed admitted to occasionally allowing fee reductions for their clients. Of these seven health care facilities, five were private dispensaries (all located in squatter and medium density areas), one private hospital and one private health centre. However, the fee reduction practised at the lower level facilities is different from that offered in the higher-level facilities. In most cases, the higher-level facilities negotiate with patients for fee reduction on transactions that involve a large sum of money.

The private dispensaries located in the squatter area revealed that under normal circumstances they would not be in favour of this practice. Now, they feel forced into this practice mainly to avoid losing their customers to drug stores. They also allow fee reductions mainly for specific/selected services. For example, consultation and registration fees (See also Section 5.2.1). For the remaining services (in case someone has
no money), they will either allow deferred payment (for those they know) or exclude them from receiving treatment.

“Yes, mainly we reduce the registration and consultation if someone does not have enough money.” (In Charge, private for profit dispensary, squatter area).

“The only fee that we tend to reduce/remove is that of registration and consultation; for the remaining fees if someone is unable to pay at a particular moment, he/she can be considered for credit.” (In Charge, private for profit dispensary, squatter area).

“I depend on selling drugs to run the facility; I cannot reduce fees; I need to cover my cost” (In Charge, private for profit dispensary, non-squatter area).

However, the Catholic dispensary located in the squatter area and the private dispensary located in the non-squatter area both revealed that they do not reduce fees for their customers. This is because these facilities are more financially secure and face different level of competition compared to other private dispensaries located in squatter areas (See Chapter 7, Section 7.3.3). The higher-level private health care facilities (hospitals/health centres) that admitted to reducing fees for some of their customers said that they only do this for customers whose costs are not covered by medical insurance and are demanding expensive medical services. That is, mainly for admitted cases. In these cases, they will consider reducing prices for some of their services in order to decrease the total cost to the patient.

“Yes, we usually experience some payment problems especially with the in-patients; sometimes we are forced to reduce part of their total charges. However, for the OPD this is not allowed.” (In Charge, private for profit hospital).

“Not very common, sometimes we reduce fees to admitted patients on average about one patient every month. If someone cannot pay, we try to reduce the fees just to cover our cost. For example, we normally charge resting fee (1-12 hrs, 5,000 Tsh) and admission fee for one night of 10,000 Tsh. Sometimes we are forced to reduce these charges for resting fee down to 3,000 Tsh and admission fee down to 6,000 Tsh.” (In Charge, private for profit health centre).
(iii) Overpricing and abuse of the insurance system

Overpricing techniques, exist in the private health sector across all levels. This practice mainly occurs (without the awareness of the patient) with the intention of increasing revenue for the health care facility. In one interview with a respondent from the private dispensary located in the squatter area, it was clear that in some cases they increase fees intentionally for some of their clients. They indicated that they overcharge through their own judgment of a patient’s ability to pay, based upon a patient’s dress and the nature of their economic activity. In this scenario, patients receive different charges for the same type of service provided.

“We need to survive in this market; overall our charges are about the same compared to other dispensaries around the area. However, in some cases the charges can vary from one patient to the other depending on their ability to pay...to prevent the facility from going into bankruptcy.... We are sometimes forced to judge the patient’s ability to pay by looking at the way they dress, the work they do and so on. Therefore the slightly better off can be charged more.” (In Charge, private for profit dispensary, squatter area).

The abuse of the health insurance system is also one of the illegitimate measures used to increase providers revenue. In this case, there are elements of over prescribing and/or provision of other unwanted services (e.g. procedures, laboratory tests, etc.) specifically for those few patients covered by the insurance system. Currently, the private health insurance system is still young and operates mainly within private hospitals and a few specialised clinics. In some of the interviews conducted with private hospitals, they mentioned that abuse of the insurance system is common and very tempting to conduct. Furthermore, they indicated that it takes a long time to claim their money especially from the private health insurance companies after service delivery to the insured patient. In some cases, officials from these private insurance companies request bribes in order to facilitate their payments.

“There is a need to develop further the insurance system to cover the poor and therefore avoid out of pocket payment system. At the moment there are few people (mainly the better-off) who are covered by these private insurance companies (and NHIF). But having these private insurance coverage increases temptation for the private health care providers to conduct unethical practices like over prescribing, unnecessary laboratory tests and so on.” (In Charge, private for profit hospital, non–squatter area).
“The private insurance system is still very young and fragmented. It is very hard for the health care providers to operate in this system. Once we have provided the required services to the insured patients, it is very hard to get our payment back—in some cases the officials from these companies demand bribes from us in order to facilitate payment for the services we have provided.” (In Charge, private for profit hospital, non-squatter area).

5.6 Summary: Key Findings

The following is the summary of key findings from this chapter:

- There exists price differentials on the services provided by level, sector and location of health care facilities. Overall, the prices at the private hospitals are high compared to the prices at the public hospitals. The findings from this study indicate that overall, the prices of the private hospitals are comparatively high across all the studied components. That is consultation and registration fees, diagnostic tests, basic procedures and drugs for specific treatments. The prices at the private dispensaries remain high compared to the public dispensaries. Furthermore, there is competitive pressure among the private dispensaries especially those located in squatter area, which has led to the removal and/or reduction of registration and consultation charges. The changing pattern of charges for these latter components implies that the poor face relatively higher charges (specifically on these components) in the public dispensaries than in the private dispensaries.

- There is a range of diverse opinions on the price trend across facilities at different levels, sector and spatial location. Prices in the public sector are stagnant and generally lower than the private sector due to the complex process of revising prices in the public sector. The private hospitals and dispensaries (located in non-squatter areas) have been able to increase prices over time, enabling them to cope with the increasing costs of running the health care facilities. However, the private dispensaries located in squatter areas are also experiencing stagnation in prices, as they are forced to keep their prices as low as possible despite the increasing costs of running their facilities. This is mainly due to high competitive pressure on pricing facing health care providers in these areas and very low capacity of the poor to finance adequately the provided services.
There is bifurcation of the payment structure by social class from the demand side of the health care market. This is mainly due to the diverse capacity of users to finance health care services. The current payment system is mainly dominated by the out of pocket payment structure with the main source of financing coming from the household resources across all welfare levels, but more prominent for the poor and middle level households. Overall, payment through the employer and other arrangements play a minimal role in financing health care services. The few individuals who benefit from these arrangements come from better-off households. The individuals from better-off households spend substantially higher amounts of money per visit to a health care provider than individuals from middle/poor households. This is mainly because individuals from better-off households can afford relatively higher charges from the private hospitals. However, the individuals from poorer households struggle to cope with the existing payment structure and therefore existing circumstances have forced them to develop various coping strategies to access health care services. These include the deferment of payment practice at health care facilities, requesting assistance from close relatives/friends and compromising expenditure on other basic needs.

The supply side is facing a challenge in relation to providing adequate and quality health care services taking into account the diversified ability of users in financing health care services and very low coverage of the existing insurance system. The suppliers have developed diversified strategies to cope with a bifurcated payment structure. Health care facilities, particularly the private dispensaries serving the majority of the poor, face a significant challenge in striking a balance between surviving in a highly competitive market and provision of standard services to the poor. In this way, they are forced to develop strategies that will enable them to survive in the market and maintain their client share through accommodating the inconvenience they face with out of pocket payment structures. These strategies include deferment of payment and fees reduction, largely in the lower segment, and overpricing and abuse of the existing insurance system particularly in the upper segment.
This chapter questions why there is an outflow of the poor in public health care provisioning system. That is, why would the poor depend heavily on lower level private health care provisions or be excluded from accessing health care services, if they can access subsidised public health care services? This question relates to the results obtained in Chapter 4, which clearly indicate high dependency of individuals from middle and poorer households on lower level private health care services as compared to services provided by the public sector. Furthermore, the results also reveal the exclusion of the poor from utilising health care services mainly due to the high cost of accessing health care services (See Chapter 4, Sections 4.3 and 4.4). This evidence suggests that the public sector does not provide effective flow to the market and hence an inadequate fallback position for the poor. In this regard, the lower segment of the private health care provision which is struggling to cope in the current health care market is seen as the best option for the poor (See Chapter 7, Section 7.4).

The provision of public health care services in Tanzania faces many challenges despite some limited improvements recorded in recent years due to ongoing health sector reforms (URT-MOH 2005; URT-MOHSW 2007a, 2007b). The institutional gaps in the public sector affect the protection mechanism of the poor through the existing exemption system, while the weak incentive structure has direct impact on the quality of services provided. The concept of institutional incentive for health workers outlined here is that explained in chapter 2, section 2.2.1. The context of incentives for health care workers is defined within the organizational arrangement for the health care system and in which it influences both the organisational and individual performance. Incentives for
health workers include all the rewards and punishment that providers face as a consequence of the organisation in which they work, the institution under which they operate and the specific interventions they provide. In this regard, health workers’ incentive comprise both financial and non-financial incentives including working conditions, leadership/supervision structure and trust (Hongoro and Normand, 2006, WHO. 2000, Gilson et al. 2005).

Furthermore, the successful provision of health care services depends on acceptance and utilization of health care services from the demand side of the health care market. The utilization of health care services by patients is influenced by features of service such as respectful treatment, cost and time for accessing care (Gilson et al. 2005).

The inadequacy of incentive structures for both the demand and supply sides is documented in this chapter, and is closely linked to the institutional gaps in the health care system. Institutional gaps refers to absence of key aspects of working conditions and regulations that provides disincentive for good working practices and hence access to health care services.

Based on these arguments this chapter addresses the hypothesis that absence of important incentives for good work within facilities is likely to be associated with poor and disrespectful treatment of patients and therefore downward spiral of lack of trust between health workers and patients and crowding of low income patients into the low-charging segment of the health market.

Figure 6.1 displays this hypothesis. It suggests that the inadequacy of public health care provisions reduces demand for public health care services and therefore lead to outflow especially by the poor from the public sector. In this regard, the demand falls to the lower level private providers or leads to exclusion from accessing health care services. That is, forgoing treatment with the risk of long-term deterioration of their health status.

This chapter analyses two major constraints currently facing the provision and utilisation of adequate public health services:

(i) Insufficient infrastructure, human resource for health and medical supplies.

(ii) Inadequate protection of the poor due to ineffectual exemption system.
Figure 6.1
Outflow of the poor from public health care provisions

The analysis of these aspects has been done using the triangulated results from interviews conducted with providers and exit patients in public health care facilities, municipal level interviews and household surveys. Triangulation of results enables examination of the issues from different angles, highlighting other components of the public health care system. Finally, the analysis in this chapter is significant because the current literature documents that improved public health care provisioning has direct impact on improved overall health care regulation systems as well as services provided by the private sector (EQUITAP 2005). That is the improvement in public sector will have an influence on improvement in private health care provision.
6.1 Insufficient Infrastructure, Human Resources and Drug Supplies

This section analyses the major incentive problems faced by both staff and patients and the institutional gaps that underlie them. The disincentives challenge public health care provision and hence facilitate the outflow of the poor mainly to lower level private health care provisions. The following gaps have been analysed in depth: insufficient drug supply; severe shortage on Human Resources for Health (HRH); congestion/overcrowding of patients; weak planning processes at the municipal level; and poor infrastructure and working conditions at the facility level. These gaps lead to disincentive to the providers of health care services as they fail to provide adequate and quality health care services, mainly due to prevailing insufficiency/poor working conditions. On the other hand, these gaps also bring disincentives to the users’ side (especially the poorer) and push them out of the public health care system to seek alternative services available and/or exclusion from accessing health care services.

6.1.1 Insufficient drugs supply: View from demand and supply sides

The availability of drug supply in public health care facilities is one of the major components that attract the poor to subsidised health care services. However, there is a severe shortage of drug supply in public health care facilities and this provides disincentive for the poor to attend these facilities and hence affects access and the pattern of their health seeking behaviour. Confirmation of this finding came from the household and exit patient interviews. During the exit patient interviews, the researcher observed a substantial number of patients, especially those with young children, being sent away without drugs from the public health care facilities, and were asked to purchase them elsewhere. This problem provides disincentive, especially for poorer patients trying to access public health care, because there is no guarantee of the availability of drugs, which might lead to wasting time by visiting these facilities expecting to receive exempted/subsidised drugs. The following are some of the comments from exit patient interviews about the inadequate supply of drugs in public health care facilities.
“The services here are sometimes good and sometimes bad. We are supposed to get free treatment that is including free supply of drugs. But most of the time the drugs are not available and we are required to buy. I cannot afford to buy these drugs, as they are expensive. Therefore, my son ends up not getting treatment as it is required and his condition is not getting better.” (Female, 27 years old, mother of child under five, public dispensary, squatter area).

“Children under five are supposed to receive free health care in public facilities. But most of the time we do not get free drugs, therefore we are supposed to buy them. In most cases, we cannot afford full dosage prescribed, and we end up giving the children half a dose” (Female, 22 years old, mother of child under five, public dispensary, squatter area).

“I like to come to this hospital because it very cheap compared to the private facilities. But it is a gambling decision as in most cases the drugs are not available.” (Male, 37 years old, public hospital).

These findings are also supported by the interviews conducted at the household level.

“Children under five are supposed to receive free health care services, but most of the time there are no drugs and so you have to buy them. In this case, it is not free anymore. For this illness of my daughter, I have been buying drugs all the time it is very costly.” (Female, 32 years old, mother of child under five, visited public dispensary in squatter area).

“I prefer private dispensaries than the nearby public dispensary. The services are good and the drugs are available most of the time, which is the opposite of the services you would get in the public facilities, most of the time they do not have drugs.” (Male, 27 years old, private dispensary, squatter area).

“The services at the public hospital were very poor in both episodes. The drugs were not available. She was not given her medication for two days while they had already paid for it.” (Male, 43 years old, visited public hospital, non-squatter area).

The supply side acknowledges recent improvements in drug supplies in the public health care facilities. However, all the public facilities interviewed were of the same opinion that the allocation of drugs they receive is still very small compared to the actual demand from the patients they serve. Further, the study revealed that this situation brings disincentives to health care workers as it can sometimes lead to misunderstandings
with the community (public) they serve. This is because the public expects better services, including adequate supply of drugs, which in reality public facilities are not in a position to offer.

“People have over expectation from the public system; they need to be informed on exactly what the government can provide to minimise tension between the public health care providers and the public. We offer what we are able to do; in some cases, we run out of drugs and patients (especially the ones who are entitled for exemption) are becoming very disappointed.” (Medical Officer in Charge, public health centre).

Furthermore, the user fee also plays an important role in supplementing the supply of drugs in public health care facilities. Those in charge of all the public health care facilities interviewed acknowledged this, especially during times of severe shortages. However, even this supplement of drugs purchased using user fee money is not enough to satisfy the actual demand for drugs required by patients, this study shows.

“The user fee has proved to be very useful in assisting to purchase additional drugs especially at the time of severe shortage. The last time we experienced drug crisis, user fee money was used to ensure that the hospital had at least drugs and supplies for emergency cases such as for the theatre and necessary life saving drugs.” (Hospital Health Secretary, municipal hospital).

The system of supplying drugs to public health care facilities is also not functioning efficiently. One of the main complaints by those in charge of health care facilities interviewed is on operational inefficiency of Medical Store Department (MSD). The MSD fails to supply the required drugs on time. There is a need to review the whole system of procuring drugs from this department.

### 6.1.2 Severe shortage of human resources for health (HRH)

Human resources for health care are a key input to ensuring efficiency and adequate provisions of public health care services. However, the health sector is currently facing a serious shortage of health care staff (URT-MOHSW 2007a, 2007b; COWI et al. 2007). This problem leads to disincentive to both the health care workers and patients. The health care workers are sometimes facing the problem of overburden of activities and performing the activities which they are not entitled to perform whereas to the patients it has direct impact on the quality of health care
services they receive. This problem was clear in all the public health care facilities interviewed. In these facilities, the number of available health care workers was inadequate compared to the required number of staff to ensure smooth operations of these facilities. In extreme cases, some key health care staff were completely not available in the health care facilities and therefore their specialised services were unavailable to patients. For example, in the two public dispensaries interviewed, health care workers responsible for laboratory work were completely not available and therefore these dispensaries could not offer these services. This problem impacts the quality of services provided by these facilities.

Furthermore, due to insufficiency of HRH, responsibilities of higher cadre staff fall to lower cadre staff. In both public dispensaries visited, the person in charge of the dispensary was the Clinical Officer (CO) instead of the Assistant Medical Officer (AMO) as required by law. The problem of severe shortage of HRH provides disincentive to the available health care workers as it overburdens them with an increased workload, forcing them to undertake responsibilities that are above their professional capacity. Both household and patient exit interviews confirm the problem of insufficient health care staff:

“Most of the time the laboratory tests are not available so they depend so much on clinical observation, or we have to go and conduct the tests in the nearby private dispensaries.” (Female, 27 years old, exit patient interview, public dispensary, squatter area).

“They need to improve laboratory services and have someone to perform this task; they depend so much on clinical observation. Some behaviour and attitude of health care workers are also not good. They do not pay attention to the patients.” (Female, 31 years old, exit patient interview, public dispensary, non-squatter area).

“If I have little money I do not take my children to the public dispensary, they do not have drugs and also they do not conduct laboratory tests.” (Female, 38 years old, household interview, squatter area).

There are two main factors contributing to the shortage of human resources for health in the current public health care system: the weak recruitment process and the training system.
Recruitment process

There is a severe administrative problem in the implementation of recruitment and retention policies of public health care staff and this brings about disincentive to the health workers performance. The Joint Annual Health Sector Review (JAHSR), held in September 2007 discussed this issue in-depth (URT-MOHSW 2007b). Furthermore, those in charge of all four public facilities interviewed admitted that it is not easy to get the type and/or adequate number of staff required for their facilities as the recruitment and replacement mechanism is very complex and bureaucratic. Whenever there is a demand for additional or replacement of staff in their facilities they are required to send their requests to the Municipal Medical Officer for Health (MMOH). However, experience shows that due to the bureaucratic procedure involved in the process of recruitment, requests process slowly. This is because permission to recruit staff requires the MMOH (through the Municipal Council) to liaise with the President's Office: Public Service Department and the Prime Minister's Office: Regional Administration and Local Government.

“The hiring procedure is very cumbersome. When there is a vacancy, it takes a long time to be filled. In most cases, it takes about six months to one year to recruit a new staff. There is a need to reduce this bureaucracy.” (Medical Officer in Charge, public health centre).

“The employment system is very bureaucratic as it takes a long time to fill in a vacant position; it can take more than a year. For example, it is more than a year now since we have sent our request to the MMOH for getting someone responsible for the laboratory service, up to now we have not heard from them and therefore we cannot offer these services—the patients are really suffering.” (Clinical Officer in Charge, public dispensary).

Unsystematic Structure of Staff training

In recent years, the public health sector improved in-service training opportunities for its health workers (URT-MOHSW 2007a, 2007b). All the health care facilities interviewed acknowledged that there are substantial training opportunities for their staff both in short and long-term arrangements. Availability of training opportunities is one of the key incentives for health care workers in the public sector. This is because in most cases, the cost for training is fully covered and they receive their full salaries, when they are attending these trainings.
“Many of our staffs have gone for training; it is a very good incentive for the health workers. 60 per cent have at least gone for short-term training in the past two years and about 20 per cent are attending long-term training.” (Medical Officer in Charge, public health centre).

However, results from this study indicate that staff training in public health facilities is not systematic. This leads to a problem of an unbalanced number of staff going away for training, leaving behind few staff to carry out activities at the facility level effectively. There was a shortage of medical officers at the municipal hospital. This was mainly because of the fact that four out of eight medical officers employed by this hospital were attending long-term training, forcing hospital management to depend more on the services provided by the Assistant Medical Officers (AMO) as a backup strategy.

Given this scenario, there is a need for a systematic training schedule that will enable staff to attend training programmes without jeopardising the operation at the facility level. The designed training schedule will also have to take into consideration a wider range of available training opportunities for staff, that is, both internal and external opportunities. The trend shows that health workers are able to secure training opportunities on their own, which sometimes do not match the actual need of their particular facility. In addition, once the training opportunity has been attained it is almost impossible for the facility management to deny staff the granted opportunity. Furthermore, there is also a need for all funding and training opportunities to be coordinated to accommodate the actual needs of the health care facilities.

“Training programmes and available funding opportunities need to be integrated in our strategic plan. We need to identify gaps and design a systematic training programme for our staff. At the moment, the training component is very disorganised; everyone is trying to secure his/her own source of funds, once obtained it is hard to deny the opportunity. The policy does not allow an employer to disallow an employee to go for training after serving for specified period of time. The hospital should also have autonomy on specified training funds in order to design its own training programme based on the actual needs and also be in a position to allow our staff to attend these programmes systematically.” (Hospital Management Secretary, municipal office).

There is also a problem in the perception and design of the short-term training programmes. Health care workers sometimes perceive the
short-term training more as an opportunity that will allow them to earn extra money through the allowance given for attending these programmes. This perception among health care workers jeopardises the overall importance and meaning of attending these programmes. Furthermore, interviews with those in charge of the public health care facilities revealed that the short-term training programmes are mostly designed at the municipal level without proper consultation with the health care facilities. Therefore, it can happen that the training offered to staff might differ from the actual demand/need at the facility level.

“MMOH is the one that is organising these short-term training courses for the health staff based on set of identified priority areas example the basket funding priorities. However, it is happening that these priorities might differ with the actual requirements at the facility level. Therefore, there is a need to link the designing of these short-term programmes between the MMOH and the health care facilities.” (Hospital Management Secretary, municipal office).

6.1.3 Congestion/overcrowding in public health care facilities

There is a severe problem of congestion/overcrowding in public health care facilities (URT-MOHSW 2007a, 2007b; URT-MoH 2005). In all the public facilities visited, there was clear evidence of the problem of patient overcrowding. Many outpatients were observed to be waiting for services in long queues, while in higher-level facilities those admitted were numerous in comparison to the capacity of the medical wards. Patient overcrowding in public facilities indicates a lack of adequate capacity to supply the services demanded by the public. The problem of inadequacy of human resources for health care (as explained earlier) and insufficiency of other medical supplies intensifies this problem.

“The main reason for having congestion of patients is shortage of man-power and medical supplies. Our staff are really trying hard; we receive patients even from up country and other municipals. For example, we have about 210 beds for admission; but usually we admit up to 350 patients; therefore, our patients are forced to share beds.” (Hospital Management Secretary, municipal hospital).

Overcrowding of patients at higher levels of public health care facilities is also attributed by the element of patients to bypass lower level health care facilities. The patients tend to bypass the dispensaries and
health centres when seeking health care, and go straight to the municipal level hospital. However, in the patient’s perspective this decision can be rational due to anticipation of better services at higher-level health care facilities.

“The health centre is supposed to be a referral point for lower level health facilities; but this is not happening (as much) since patients from the lower level facilities do bypass us and go straight to the municipal hospital. This is because we cannot manage to provide many specialised care. This makes the municipal hospital very congested” (Medical Officer in Charge, public health centre).

The problem of patient congestion in public facilities also leads to disincentive to both users and providers of health care services as it has direct impact on time to receive care and maintenance of cleanliness of these facilities, and is also associated with elements of abusive behaviour of health care workers to patients including aspects of demand for unofficial charges. These elements are analysed in detail below.

**Time to receive care**

The congestion of patients in public health care facilities has a direct impact on the amount of time that a patient will use to receive the health care services and this brings about disincentive to the patients in accessing public health care services. The results from the household and exit patient interviews reveal many complaints on this aspect. Many patients were of the opinion that compared to the private sector; it takes a long time to receive health care services in public health care facilities. The following are some of the opinions of patients on this aspect.

“The quality of services offered here is in between, because it takes a long time to be registered and to see the doctor, in my case it took more than three hours. The hospital is overcrowded with a lot of patients.” (Male, 23 years old, municipal hospital).

“It takes a long time to see the doctor even for critical cases, the hospital does not have enough doctors, it is even worse on the weekends.” (Female, 26 years old, municipal hospital).

“The waiting time is long, despite the fact that I know the medical officer in charge of the facility personally but still I have spent about five hours to get tests done and have consultations.” (Female, 35 years old, public health centre).
“The government facilities lack adequate health care staff and modern equipment. This creates long queues and hence it takes a long time to receive services. Hence, for me to save time and be satisfied, I prefer private facilities for my family and relatives.” (Male, 62 years, visiting private hospital, non-squatter area).

“The services were very bad when we took our three year old son to the nearby public dispensary. The queue was so long. We had to wait for hours while the doctor was on the phone for a long time instead of attending patients.” (Male, 35 years old, visited public dispensary, squatter area).

“There are very long queues at the Municipal Hospital and I had to wait for a very long time to see a doctor.” (Male, 34 years old, visited municipal hospital, squatter area).

**Payment of extra fees over and above normal charges**

There is a problem of paying extra fees, over and above the required charges, in public health care facilities. Either health care workers or the patients themselves may initiate attempts of extra payment for many different reasons. Interviews show that congestion and inadequacy of medical supplies increasingly facilitate this behaviour. Due to long wait times, some patients are tempted to offer extra payments to health care providers in order to receive immediate attention and services provided. However, it also happens that some health care providers, by taking advantage of insufficiency of medical supplies and health care personnel, demand these payments from patients in order to provide the service required. In some cases, patients provide voluntary extra payments to health care workers as an indication of their ‘thankfulness’ for the services provided to them. This mainly happens for exempted services especially in the labour (maternity) wards. This was observed to be a common gesture for patients after a successful delivery to give some money to the health care workers who assisted them in the process. The following are some quotes from the household survey, provider and exit patient interviews.

“Many people pay bribes without knowing it. They use it as a thank you for good services given by the health care workers. It is hard to control this; especially in the labour ward after giving birth, people are not charged anything and they feel obliged to give something to the health worker(s) who attended them. Also, there are some people who do not like to follow procedures; they want to get the services faster than other patients, so they
give money to health workers in order to be attended quickly.” (Medical Officer in Charge, public health centre).

“I do not have the money to purchase the drugs prescribed. I am very disappointed because I was expecting free treatment for my child. Sometimes health care workers in this facility demand a bribe for them to provide you with the free drugs.” (Female, 21 years old, mother of child under five, exit patient interview, public dispensary, non-squatter area).

“I have heard from other women, the ones who give the health care workers extra money, that they are always assured of having drugs for their children and also through this process, they build personal relationships with health care workers.” (Female, 29 years old, mother of child under five, exit patient interviews, public dispensary, squatter area).

“There is a lot of bureaucracy in government health care facilities hence for one to be attended properly you have to bribe the nurses or doctors. This is the big reason why people with high incomes dislike going there.” (Female, head of household, household interview, non-squatter area).

**Cleanliness**

The problem of patient congestion is associated with poor cleanliness of public health care facilities, especially the toilet facilities and medical wards. In all the public health care facilities visited, the condition of toilets was poor. The condition of medical wards in the municipal hospital was poor. In this hospital, the medical wards were extremely congested and some patients were sharing available medical beds while others were seen lying on the floor. The medical wards of this hospital were not clean; in some places, blood and vomit were observed on the floor. Furthermore, the interviews revealed that cleaning arrangements for this hospital were better during the day than the evenings. During the day, they arranged for hired cleaning services, while at night the nurses are supposed to assist in cleaning while attending patients at the same time. This has proved inefficient. In addition, the condition of bed sheets was poor, mainly because the hospital was experiencing a shortage of bed sheets. The standard requirement is for each bed to have six sheets but they had only an average of three sheets per bed.
6.1.4 Impact of Public Sector Behaviour on HSB

Abusive behaviour of health care workers towards patients showed in both the household and patient exit interviews. Problems of congestion and inadequate medical supplies exacerbated abusive behaviour. The problem of abusive behaviour of health workers in public facilities also explains crowding into private dispensaries by the poor.

“The behaviour of public health care workers needs to improve. Sometimes they shout at patients for no good reason; it will be more useful if they can explain things to patients clearly especially to mothers with young children instead of just shouting.” (Female, 28 years old, exit patient interview, public health centre).

“Health workers in government health care facilities are not polite and can be cruel at times. This is because majority of people who go there are low income earners or people with no income, and so the nurses and doctors feel they can mistreat them as they wish. The government should look into this matter and make sure there are other methods of payment if one cannot afford to pay so as to eliminate the cruel actions.” (Male, 47 years old, household interviews, non-squatter area).

“The health care workers are not cooperative and they usually shout at patients. It takes a long time to receive care, there are too many patients, it is a small hospital compared to the number of patients they need to serve.” (Female, 36 years old, municipal hospital).

Extreme case of abusive behaviour: Public dispensary located in squatter area

The public dispensary located in the squatter area was observed to have a severe problem of abusive behaviour by health care workers towards patients. During the fieldwork interview, the woman in charge of this facility was observed to be extremely arrogant and abusive towards patients and some of her colleagues. She was observed using abusive language and shouting at almost everyone around the facility. It was also very hard for the researcher to secure appointments and conduct interviews in this facility. The researcher received more than five false appointments and waited for hours without being able to conduct interviews. The woman in charge made the researcher wait for her and then, at the end of the day would claim not to have time and ask for another appointment. However, this situation allowed the researcher to observe the day-to-day
operations of the facility, and to see how the health care workers interacted with patients.

First, the researcher observed that there was a prevailing tension among the health care workers in this facility. This is mainly because the officer in charge was using a divide and rule management style. She had few health care workers who were her favourites/allies and the remaining staff was bullied. The researcher saw clearly that the officer in charge was on friendly terms with certain favourites, as they would go into her office to chat and/or have tea for hours. For the remaining staff, the officer in charge would constantly use abusive and intimidating language. Second, observations show that the officer in charge, together with her favourite staff, used abusive and arrogant language towards patients. The patients also had to wait without receiving any services for many hours and without any explanation. In some cases, the officer in charge would be gossiping with her favourites or talking on the phone.

The fact that the pressure to deliver adequately in this public facility serving the poor is low can help explain this phenomenon. The problems experienced in this facility stem from the inability of the poor to influence the public health care delivery system. In this regard, the officer in charge of this facility can easily get away with bad behaviour, knowing that the poor have no influence on the system. According to Nelson (2003: 119), for public policy to work effectively there is a need of having pro-poor alliance, based on shared interests, one between the poor and those slightly higher on the income ladder. According to Hirschman (1970), the withdrawal of the better off from utilisation of public services (in this case lower level public facilities) impacts on the poorer group who are left alone and unable to voice their dissatisfaction with services.

**Impact of differences in public sector behaviour on demand for private services**

The abusive behaviour of health care workers to patients observed in this public health care facility also explains the outflow of the poor from this neighbourhood away from utilising services at the public dispensary level. Chapter 4 (Table 4.8) showed that the poor located in this part of the squatter area (Mzimuni [1]) were substantially more likely than those in the other squatter area to utilise the services provided by nearby private dispensaries. The qualitative evidence provided here provides an explanation: avoidance of the services from this particularly poor public dispensary. The exit patients and household members around the area
expressed their dissatisfaction at the abusive behaviour of the workers from this dispensary.

“I only take my daughter here to the MCH clinic. But when she gets sick, I take her to the Catholic dispensary, because here the health care workers are not polite and attentive to patients.” (Female, 22 years old, mother of child under five, public dispensary, squatter area).

“The health workers here don't care about the well being of the patients, they are usually rude and do not do proper diagnosis for the patients.” (Female, 19 years old, public dispensary, squatter area).

“The government health care facilities usually have very bad services and I do not like the behaviour of the health care workers the way they behave towards patients. The nearby public dispensary is a good example—the nurses and doctors are rude and they really do not care about patients. These behaviours force me to go to private health care facilities, even if I do not have money, I would not want to go to public facilities. I would rather buy drugs from the pharmacy” (Male, 62 years old, Mzimuni squatter area).

“The service and treatment provided to our daughter at the public dispensary was bad. We were not satisfied at all. It took a long time to obtain the service and the workers were not polite and attentive, they just don't care. The services at the catholic dispensary were very good for all episodes. There the health care workers are very attentive.” (Female, 25 years old, Mzimuni squatter area).

6.1.5 Poor infrastructure and working conditions at the facility level

The availability of good infrastructure is essential to ensure smooth provision of public health care services. This study has observed the following problems on the level of infrastructure/working condition that hinders effective service delivery of the public health care facilities: transportation problems in the referral system, irregular water supply and insufficient capacity of premises. The existence of these problems also contributes to disincentives to the users and therefore the outflow of the poor from public health care facilities. This is because these problems bring many inconveniences to accessing quality health care services.
Transportation problems in the referral system

Severe transportation problems are one of the primary issues affecting the current referral system in the public health care facilities. In all the public health care facilities interviewed, it was revealed that the ambulance system does not function effectively. In most cases, the facilities use ordinary taxis to transfer patients.

Transportation is the problem; we have one old ambulance, which is always not working. Therefore, for emergency cases we use ordinary public taxis. The transportation cost is covered by the patient unless we really see the patient cannot afford the transportation cost (Medical Officer in Charge, public health centre).

“Referral system is a problem; you cannot get ambulance from the municipal hospital. If we have money (mainly from user fees) we pay for the patients transportation cost in case of emergency. But sometimes we do not have money and therefore relatives of the patients have to find their own means of taking their patients to the referred hospital” (Clinical Officer, public dispensary, squatter area).

Irregular water supply

In general, Dar es Salaam has an irregular water supply, and this creates problems in ensuring the smooth provision of health care services. All the public health care facilities visited with the exception of the municipal hospital experienced this problem of irregular water supply. The municipal hospital managed to invest in proper infrastructure that ensures regular supply of water. In addition to the city water supply, the hospital has a water storage system together with their own supply of water through boreholes.

Unlike the municipal hospital, the public health centre and the dispensaries visited face severe water problems. These facilities have inadequate storage systems and depend solely on the irregular supply of water from the city authority. They experience regular water shortages, which pushes them to purchase expensive water services from private vendors. This situation forces these facilities to use a substantial amount of money from their very limited resources (mainly from user fees) for additional water supply.

“We do not have running water; it is a very critical problem. We have three reserve tanks but they are not enough, in most cases we are forced to
buy water from water vendors, which is very costly. We are forced to use the money we have collected from user fees, which would have otherwise been used to purchase drugs.” (Medical Officer in Charge, public health centre).

**Insufficient capacity of premises to accommodate increased number of patients**

The problem of insufficient capacity of premises concerns all the public facilities visited. For example, no public dispensaries have an adequate number of rest rooms and the higher-level public facilities visited (hospital/health centre) did not have enough medical wards. Furthermore, these facilities also have a shortage of adequate storage space and staff houses. In the public dispensaries visited, sometimes the consultation rooms temporarily served as resting places for patients who required observation for an extended period and this inconveniencing other patients.

“In one incidence there was someone who was brought to a public dispensary with an emergency cholera case; the patient was dehydrated and needed water drips before being referred to the cholera camps; there was no resting room to keep him and so he was kept on a consultation bed for a while. This scenario brought about great inconvenience to the facility staff and patients as cholera is a contagious disease.” (Researcher’s notes, provider interview, public dispensary).

### 6.1.6 Top-down approach in municipal level planning process

Overall, the public health care facilities are better involved in the municipal planning process than the private health care providers (See Table 6.1). However, the management and planning of health care activities largely takes place at the municipal level, where the health care facilities, who are the main implementers, have minimal influence in this process.

The public health care providers interviewed all shared the same opinion that, even though their involvement in the municipal planning process is better than the private health care facilities, they see their contribution to the process as very limited. This is because the planning process follows more of a ‘top–down approach’ instead of being a participatory process. Furthermore, there is weak information flow from the municipal level to the facilities after completion of the planning process that is to say, a weak feedback mechanism.
I can say our involvement in the municipal planning process is very minimal. We are involved in planning and budgeting of our activities for the next financial year; but all the guidelines are from the municipal authorities. After submission, we wait for what they have to decide. Our planning power is weak we usually take directives from the top and there is very little room for suggestions from the bottom” (Clinical Officer in Charge, public dispensary, squatter area).

“At least every quarter those in-charge of all public health care facilities meet to discuss different issues like finance, staff, drugs and treatment, policy issues, etc, but to what extent we have influence on this process I cannot tell, as we are mostly there to take directives rather than to contribute to the process” (Medical Officer in Charge, public health centre).

“The involvement is almost not there; we usually plan our activities at the hospital level then submit them to the municipal office. However, even when we plan our activities the criteria are being brought down from the municipal; we need more involvement in this.” (Hospital Management Secretary, municipal hospital).

Furthermore, poor involvement of private health care facilities in the municipal planning process indicates a low level of interaction between public and private sectors. The private providers interviewed indicated existence of low level of interaction between these two sectors, especially on the planning for extending training opportunities to private health care providers and on implementation of joint interventions.
6.2 Inadequate Protection of the Poor: Ineffectual Exemption System

The results of this study indicate that there is an exclusion from accessing health care services especially by individuals from poorer households and this indicates presence of institutional gaps in the current health care system in protecting the poor. Chapter 4 indicates that about 30 per cent of individuals who were ill did not consult a health care provider, with the largest component coming from the middle and poor households. The provision of health care services is highly commercialised and this makes it difficult for the poor to access them. The two main reasons given by the poor who did not consult health care were the cost of accessing care is too expensive for them while others opted for the convenience of self medication, which is also less expensive than visiting a health care facility (See Chapter 4, Section 4.4). This section questions the reasons behind exclusion of the poor from accessing health care services while there is a protection mechanism in place through the exemption system to aide them. This section uses information from the household survey, municipal level interviews and patient exit and provider interviews to identify gaps in the current exemption system.

The government introduced the exemption policy after introduction of a cost-sharing scheme in 1993. The cost-sharing scheme started the application of user fees for different health care services provided in government health care facilities. These reforms marked the end of government provisions of free medical care to all citizens (See Chapter 1, Section 1.3.3). Therefore, in order to safeguard universal access to health care and the implications associated with the introduction of a user fee, the government introduced the exemption policy. This policy stems from equity considerations and aims to safeguard access to care for some identified groups in society. In this regard, the government mandated the following categories exempt from paying fees at any government health care facility (URT-MoH 1999):

- **Exemption based on particular services**: maternal and child health services including deliveries.
- **Particular age groups**: children under the age of five.
- **Particular diseases**: some identified diseases that drain substantial income from the patient for example tuberculosis, HIV/AIDS and any disease if it is epidemic.
• Populations that cannot afford to pay because of low income: including the elderly 60 years and older, and the poor from other age groups not covered in the policy. In order for these groups to acquire exemption, they need to be certified as poor first by the local government authority (through the street government and their ten-cell leader).

However, the overall exemption system is perceived to be inefficient and has loopholes that allow for misuse and/or abuse of the system (Mamdani and Bangser 2004). This situation was also confirmed in an open statement made by the Minister for Health in the sixth joint annual health sector review. ‘It is an open secret that the exemption system is not working well’ (URT-MoH 2005). This section therefore explores the efficacy of the exemption mechanism from the perspectives of both the users and providers of public health care services. Furthermore, this section will analyse the tension or conflict of interest observed between the public health care facilities and the exemption system in place.

6.2.1 Gaps in the current exemption system
The main gaps in the current exemption system include limited public knowledge of the whole exemption system and a poor system for identifying the poor, starting with the local government level.

Is the public adequately informed about the exemption system?
This study found that people are partially aware of the current exemption system. As indicated above, there are four categories under the current exemption system. However, the public is not well aware of all these categories especially for the population (including the elderly) that cannot afford to finance health care services because of income.

Information from the household survey indicates that overall, the poor and the middle level group appear to be somewhat better informed about the exemption system than the better-off group (See Table 6.2). The fact that the better off depend less on the public health care provision and therefore might not be interested in finding out about the process may explain this position. This seems to suggest that a high proportion of those who are eligible know about it, though they may not be aware of all the exemption categories and/or procedures to follow. However, the chi-square statistic indicates that the null-hypothesis of
statistical independence cannot be rejected and, hence, no firm inferences can be made from these differences noted in the sample.

**Table 6.2**  
*Household survey - awareness of the exemption system*

<table>
<thead>
<tr>
<th>Awareness of public</th>
<th>Exemption procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH assets, indicator</td>
<td>Yes</td>
</tr>
<tr>
<td>Poorer</td>
<td>2185</td>
</tr>
<tr>
<td>Middle</td>
<td>2202</td>
</tr>
<tr>
<td>Better</td>
<td>861</td>
</tr>
<tr>
<td>Total</td>
<td>5248</td>
</tr>
</tbody>
</table>

Key: weighted counts  
row percentages (Italic, Bold)  
Number of observations = 300

Pearson:  
Uncorrected $\chi^2(2) = 5.5540$  
Design-based $F (1.96, 111.99) = 1.7879$  
P = 0.1727

Source: Author’s Household Survey Data

Furthermore, when comparing this information by spatial location, the results indicate that the poorer households in non-squatter areas appear somewhat less informed on the exemption procedures, compared to the poorer households in the squatter area (See Table 6.3). The main reason is that in the squatter areas, the poor are located in one area and therefore it is easier for them to share information that is beneficial to them, compared to poorer households in the non-squatter areas, which in most cases are located far from each other. Again, however, this evidence is rather weak since the probability value of the F-statistic does not warrant the conclusion that the null-hypothesis of statistical independence between both variables can be rejected.
The information from both the household and patient exit interviews indicates that the majority of people, including the poor, have partial knowledge of existing exemption categories. Most respondents were aware of the exemption policy for children under five years old and pregnant women, and very few of other exemption categories. For example, out of all the respondents who claimed to know about the exemption system, only two respondents from household interviews and one respondent from patient interviews mentioned that poor people who are unable to pay for medical services also qualify under the current exemption system.

Lack of information on the exemption system, especially for poor people unable to pay, is further elaborated using Case A below. This is the case of a poor woman, 56 years old, living in the squatter area and struggling with a heart problem. This case uncovered the problem of information including lack of clarity on procedures for obtaining an exemption.
**Case A: Lack of Information and Clarity on the Public Exemption System**

**CASE: CHRONIC ILLNESS/FEMALE/ADULT/LOW INCOME**  
*Source of Information: Narrative Interviews*

This is a case of a woman, 52 years old, suffering from heart problems. She lives with her husband and three children. Their livelihood depends on the rent they receive from renting some of the rooms in their house. On average, they receive about 60,000 shillings (approximately 55 USD) from renting these rooms and this is their only source of income.

She started having heart problems in March 2005. They first took her to Lugalo Hospital where they spent about 40,000Tsh for different laboratory tests and around 80,000Tsh for drugs. She was then required to undergo a specific scan, which was not available at Lugalo Hospital. This test was available at TMJ Hospital (Private Hospital) for the price of 180,000Tsh, which they could not afford. The test was also available at Mikocheni Hospital (Private Hospital) for 200,000Tsh, which was also too high for them. They then decided to go to Muhimbili National Hospital (MNH) (National Public Hospital) and the test was available for 100,000Tsh, which also they could not afford. They could not go back to Lugalo Hospital to see the doctor because they were not able to undergo the test. Now almost a year has passed and they have not been able to raise money to do the required test.

The patient’s condition is getting worse and she is still using the medicines prescribed to her a year ago; she purchases the drugs from a nearby pharmacy using the old prescription and/or using the finished packet of drugs. If they had to buy the drugs according to the (old) prescription it would have cost them 45,000Tshs per month, which they do not have; they therefore buy fewer drugs worth only 15,000Tshs about one third of the prescribed dose. Given their income, this is the most they can afford.

Furthermore, during the interview, it came out that they were not aware of any exemption procedure; at the MNH it was made clear to them, they could only go back for the test once they have been able to secure the money. The researcher advised them to go through the street office to secure the exemption letter and take it to the MNH in order to take the test. The researcher went back three months later to find out they were unable to secure the letter from the street office. They revealed that the ward executive officer told them he would find other means of helping them, of which they are still waiting.

The husband, 67 yrs old, was also unaware that he could qualify for the exemption under the (poor) old age group. In total, they spent about 300,000Tsh since the illness started and this is a lot of money for them.

Case A above indicates that there is no clear system in place that specifies the body responsible for providing information to poor patients eligible for exemption on how to go about the process. The main question here is—who is responsible for providing this information to the patients who are unable to pay user fees? Who is also responsible for ensuring that the system is working, once the information flows to the public? Is it the health care facilities, the municipal authority or the local government through the street government offices? This dilemma leads
to denial of adequate information on the exemption policy for many eligible poor patients.

The information from health care provider interviews confirms that there is no clear system in place to ensure clear and proper information concerning the public exemption policy is communicated effectively to the public.

“There is no clear system to inform the public about the exemption and waiver policy operating in public health care facilities. The main group affected by this is the unable to pay group. Sometimes the health care facilities do provide the information to patients on procedures for attaining the exemption letter through local government offices; but there is no systematic way of doing this and it is possible for patients who are in need of the exemption to leave the facilities without being informed of this possibility mechanism” (Medical Officer in Charge, public health centre).

“There is no proper information system to inform the public about the exemption policy in place; many people are unaware of it and its procedures; therefore, in most cases people do show up at the hospital already sick and with no exemption letter.” (Hospital Management Secretary, municipal hospital).

Lack of information regarding the exemption system in place was also confirmed from the information obtained from household and exit patients interviews (See qualitative information below).

“Procedures about what should be done if someone is not able to pay need to be well publicised and if possible made available on the information boards of all public facilities.” (Household interview, female head, 45 years old, squatter area).

“The exemption procedure is complex and not many people are aware of it. For example, TB and HIV/AIDS cases are supposed to receive free treatment, you hear some of the public health care workers sell these drugs to patients, either under the table or through bribes. It is important for the policy to be clear to the public that on these illnesses what exactly is being exempted.” (Exit patient, female, 56 years old, private dispensary).

Is there a clear mechanism for identifying the poor?

One of the major drawbacks of protecting the poor through the exemption policy is lack of clarity on the mechanism in place for identifying the poor people. The procedure for granting exemption to the population
that cannot afford to pay a user fee because of their welfare status is cumbersome and problematic in its implementation. The process of attaining exemption for this group starts at the local government (street) level where there is ambiguity in the set of criteria for identifying the poor. The street administrative office has to liaise with the patient’s ten-cell leader in order to determine the welfare position of the patient. However, the main challenge lays in the ability and the criteria used by the ten-cell leaders to conduct this task effectively. During the household survey it was observed that not all ten-cell leaders were well informed about the people residing within their ten-cell units. In this case, there is a possibility of some ten-cell leaders not being able to provide accurate information regarding the patient’s welfare status.

This situation can open room for personalised negotiation, uneven application and possible abuse. Therefore, there is a need for clarity on the procedures used to identify the poor in order to qualify for exemption. This will reduce confusion and ambiguity among the beneficiaries and those managing the system. The revision of the current exemption procedures for the poor should also consider the following attributes: Should the exemption for those unable to pay continue to be granted per individual or changed and be inclusive of other household members? Should it continue to be granted at the time the patient is seeking medical services? Once the exemption is granted how frequent should it be reassessed? In the current system, the exemption for those unable to pay mainly comes at the time the patient is in need of medical care and is granted per individual.

“The exemption system is not working well. Poverty is increasing and therefore it is becoming easier for the officers at the (street) local government level to be bribed and provide the exemption letters to people who do not deserve them. The counter checking mechanism is not in place as there is no clear linkage between the public health care facilities and the street authorities. We do not know the welfare status of our patients and therefore we depend almost 100 per cent on their welfare analysis. But how do they do it? Using what criteria?” (Hospital Management Secretary, municipal hospital).

Furthermore, once the exemption letter has been granted to a patient it is almost a permanent decision. There is no mechanism in place to review the welfare status of the beneficiaries of the exemption system. Achieving a good exemption system requires an appropriate system of
identifying the poor and keeping track of changes in their welfare status. In other countries, they integrate medical exemption for the poor with other systems in place for example, the use of unemployment/indigent cards to determine eligibility (Meng 2002).

“These are procedures that have been set by the government; the patients (those unable to pay including old people) are required to bring an exemption letter from the (street) local government authority. When the patient brings this letter, he/she has to see the hospital social welfare worker, if satisfied then the patient will be given a yellow card different from other patients (who pay the user fee) and this card has to be stamped. However, once a person has been granted the yellow card to indicate inability to pay; it is never reviewed to see if there is a change in welfare status of this person; therefore the person will continue to enjoy the exemption benefits forever; there are so many people and the follow up system is not in place” (Hospital Management Secretary, municipal hospital).

There is also the problem of selecting the ten-cell units used by the street government authority for implementing the exemption process. In the current situation the majority (if not all) of the ten-cell units used by the street government authority have been inherited from the former one party system. This is because the level of ten-cell units remains unsynchronised with the current local government system. Given the current situation of a multiparty system, there is an ongoing argument regarding the validity of the inherited ruling party ten-cell units as official units within the current local government system. This study recommends further reforms on the local government system that will include independent ten-cell divisions detached from the political structure.

6.2.2 Is the exemption coverage given to patients adequate?

This section questions the adequacy of the exemption coverage to the poor. The current exemption system focuses on the monetary component waiver or, user fee. However, the evidence shows that the non-monetary component also plays a substantive role in hindering the poor in accessing exempted services. This is to say that even with waiver of official fees, the poor still have to incur other costs to access exempted services. Apart from the user fee, other associated costs of care include food, transport and bribes (Mamdani and Bangser 2004). Furthermore, due to the inadequacy of public health care provisions, it is also a common phenomenon for the poor to finance the cost of the services which
were supposed to be covered in the exemption. For example, some have to purchase drugs and other medical supplies from the private sector, which are not available in public facilities (See Section 6.1.1).

**Case B: Inadequacy of Exemption Granted to the Poor**

<table>
<thead>
<tr>
<th>Case B: CHRONIC ILLNESS/MALE/OLD AGE/LOW INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Source:</strong> Narrative Interviews</td>
</tr>
<tr>
<td>This case involves an adult male, 75 years old, suffering from mental illness. The problem started in April 2005 as a malaria case. Eventually the problem persisted and developed into a mental illness. The family did not have money to take care of the problem. They secured an exemption letter from the street executive office after being referred by their ten-cell leader. The exemption was granted for the criteria that the patient was an old aged person (60+ yrs) with low ability to afford health care services.</td>
</tr>
<tr>
<td>They took the patient to the Lugalo hospital where he received all the treatment free of charge. Unfortunately, treatment at this hospital was not curative and the patient was referred to Muhimbili National Hospital (MNH), Psychiatric Clinic. The patient was then admitted for one and a half months. The exemption letter was also accepted at the MNH and so they did not have to pay for the medical expenses. Food was also provided to the patient. However, after discharge, the problem continued and the patient was required to attend the psychiatric outpatient clinic at MNH at least 2 times a month. The following problems stand evident in this process.</td>
</tr>
<tr>
<td>Transportation Cost: During these visits, the patient does not pay anything at the hospital however; the family has to incur the transportation cost. It was revealed that the transportation cost was too high for the family, as they have to hire a taxi to and from the hospital. Due to the patient’s condition, they cannot take him on a public transport (i.e. Daladal). For each visit, they spend about 10,000 shillings for a taxi; this makes about 20,000 (per month) for the two visits, which is too much for them.</td>
</tr>
<tr>
<td>Drugs: In principle, they are supposed to receive the prescribed drugs when they go to the OPD visits at MNH. However, there are many times where these drugs are not available and so the family is forced to purchase them. On average they spend about 15,000-20,000 per month to purchase additional drugs. They feel this is a big burden for the family, as they do not have steady income.</td>
</tr>
<tr>
<td>Source of Funding: The patient is currently living with his wife and their son. The wife also does not work, as she is 73 years old. They both depend on their son to meet expenses, but he does not have a steady job. He is a casual labourer and sometimes he hardly manages to bring in some money. In most cases, the amount of money that he brings to the family is not enough even to cover food expenses.</td>
</tr>
<tr>
<td>Home Based Care: The wife is the main provider of home base care to the patient as she plays a fundamental role in taking care of the patient on a daily basis. The wife is a standard seven-leaver with three years of training as a local midwife. Their son is also a standard seven leaver.</td>
</tr>
<tr>
<td>Alternative Care: Since the condition of the patient is not improving and they do not have adequate funds to finance the formal care, the family is now opting for spiritual healing. They usually invite the pastor of their church 1-2 times a month to provide prayers and spiritual comfort to the patient. The family does not incur any cost for this service.</td>
</tr>
</tbody>
</table>
Case B above provides a detailed presentation of the inadequacy of the current exemption system and its effects on the poor. In this case, it is clear that transportation charges and cost of medical supplies not provided in the public health care facilities is a challenge for this poor household. As a coping strategy, the caretakers of the patients have to seek alternative care, which is cheaper and more convenient given their welfare status.

The information obtained from the household and patient exit interviews support the above findings (See information below). The population that receives the exemption for their children under five were mainly of the opinion that in most cases they waste a lot of their time and money on transportation costs in anticipation of free health care services. However, it is typical for them to end up paying for the drugs and other medical supplies. Given this situation, the poor population remains in a dilemma between first trying to access free public services or go straight to other alternative sources of care.

“When our daughter falls sick, we take her to a public health care facility to get free treatment. But sometimes we are forced to take her to private dispensaries because there is so much hassle in public dispensaries, workers are not attentive, and most of the time you end up having to buy the drugs, hence it is not quite free.” (Head of household, male, 42 years, squatter area).

“I took my son (6 months) to the public dispensary because it is free for children, but the only problem is that most of the time they have no drugs, so you have to pay for them, which is expensive. In this episode, I spent 1000 Tsh for drugs, which is a lot” (Spouse, female, 30 years old, squatter area).

“Children under five years of age are supposed to receive free health care. Sometimes we do get free treatment with free drugs, but other times we have to buy the drugs. Most of the time we cannot afford full dosage prescribed, and we end up giving the children half a dose” (Female, 22 years old, public dispensary, squatter area).

“There is a problem of drugs’ availability; they need to increase the drug stock. In most cases, drugs are not available and people with young children, we suffer, as we have to go and buy drugs using our own money. And if we do not, the children suffer” (Female, 23 years old, public dispensary, non–squatter).
6.2.3 Conflict of interest between user fees and exemption policy

The revenue collected by the public health care facilities through charging user fees plays an important role in increased incentives to health care workers, facilitating management responsibilities and improving delivery of health care services. For example, all four public health care facilities interviewed acknowledged that the money they collect through user fees is an important source for paying overtime to the health care workers and purchasing additional drugs and other medical supplies during shortages. The conflict of interest between the public health care facilities and the exemptions policy arises from the fact that more services provided to the exempted patients leads to less income collected by these facilities. In this regard, while the collection of user fees aims to increase revenue for the health care facilities in order to ease their management and delivery of health care services. The provision of free services through the exemption system is becoming a hindrance to this objective.

One of the key solutions to the success of an exemption system is in its financing. Initially the plan was for the government to reimburse public health care facilities on the revenue forgone through the services provided to the exempted patients. In this arrangement, the health care providers were not expected to absorb the total cost of the granted exemption. However, the government failed to adhere to its original commitment of compensating public health care facilities in this arrangement and thus reducing their financial resources. The following quotations capture the opinion of the in-charges of public health care facilities interviewed on this aspect.

“The initial plan was for us to provide exemption to patients and then get reimbursement from the government, but this is not happening. It would have been better if the government were reimbursing the public health facilities. Currently there is tension, as we treat many exempted patients it means less revenue from user fees for the facility. We need this revenue for the day-to-day maintenance of the facility, increased allowance for health care workers especially for overtime duties, and mostly to supplement drug supplies as it is never enough. For example, pregnant women are fully exempted, on average for delivery a woman spends about 14 hours in the facility and we use five pairs of gloves; this is a lot. We usually run out of drugs since we serve many exempted patients especially those under five” (Medical Officer in Charge, public health centre).
“Exemption system creates tension; on one hand the facility has to provide exemption whereas many patients expects free services but on the other hand the facility needs to raise money to facilitate its operation (including some management and administration costs). The government promised to compensate the health care facilities for the money exempted but this has not been done” (Clinical Officer in Charge, public dispensary, non-squatter area).

“From the money we generate from user fees; the exempted patients are spending 60 per cent of it. The exemption system is stressful, there is tension, on one hand the lower income people highly depend on the exempted services offered in the public sector. On the other hand we are expected to generate some money to assist with the daily operation of the hospital; the more the exempted patients the less income is generated” (Hospital Management Secretary, municipal hospital).

Case C: Tension at the Facility Level in Provision of Exemption Services

Source: Public Health Dispensary, Non Squatter Area; Observation by the Researcher

During one of the provider interviews, the clinical officer in charge of a public dispensary revealed to the researcher that the particular facility provides services for all those unable to pay given that they have followed all the required procedures and that they have an exemption letter from the street government level or, ‘Serkal ya Mtaa’. The In-charge also revealed that in the case of emergency, all patients who are unable to pay receive a temporary waiver making all services required exempted. Furthermore, in case of emergency (and if someone has no relatives), the facility would also cover all transportation costs of the patient. The in-charge stressed that no one is denied services due to inability to pay and explains that the revenue collected from user fees is intended to serve this purpose.

However, just as the researcher finished the interview with the in-charge of the facility some good Samaritans brought in an emergency cholera case and left the patient at the dispensary (maybe to avoid further commitment). The good Samaritans claimed to have found the patient on the street and that they have no other ties. This person was extremely ill and looked poor. He was diagnosed with cholera and therefore he was supposed to be referred to the designated cholera camp (since there was an outbreak of cholera during this time in Dar es Salaam Region, special camps were formed to attend the patients). However, the researcher observed the tension among the health care workers. One of the nurses suggested that the patient was dehydrated and therefore he would require some water (IV) drip before being referred; but the drip was never given to the patient. There was also a debate going on how to cover the transportation charges for the patient to the cholera camp. They told the researcher that they will call a taxi and the patient will soon be taken to the camp. At this time, the researcher was still hanging around at the facility trying to observe what will be the outcome of this case. Time was passing and the patient was still there. One taxi was called but after some negotiations, the taxi was released to go and they claimed it was too expensive. Two hours later, the researcher decided to leave the dispensary, the patient was still there without the water (IV) drip and there was no transportation to take him to the referred camp.
The existing tension between public health care facilities and the exemption policy may discourage public health care providers from providing adequate information and the required services to patients. Case C above elaborates this point.

The existing tension between the health care facility and the exemption policy is also accelerated by the higher magnitude of exemption patients that these facilities are supposed to attend. Evidence shows that the population that demands frequent health care services are the ones exempted. The study by Hutton (2005) on the assessment of exemptions and waivers in Dar es Salaam indicates that the value of services provided to the exempted patients range from 40 to 60 per cent of the total value of services provided. Furthermore, exempted cases in the three districts of Dar es Salaam ranged from 30 to 50 per cent in 2004. Figures obtained from patient exit interviews also confirm this data. Table 6.4 indicates that for all patients interviewed from public health care facilities, 50 per cent (20) received exemption from the services received on that visit to the health care facility.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>95%</td>
<td>100%</td>
</tr>
<tr>
<td>Public</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>50%</td>
<td>50%</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>115</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>18%</td>
<td>82%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: 140 Exit Patients Interviewed
Source: Author’s Exit Patient Interviews

6.3 Summary: Key Findings

This chapter provides an understanding of the incentives problems and associated institutional gaps in public health care provisions, which contribute to the outflow of the poor from utilising public health care services. The main disincentives that affect the performance of health care workers were identified as severe shortage of human resources for health; poor infrastructure/working condition (including weak referral
system); and organisational and supervision aspects (which also include weaknesses at the municipal level planning, staff training and recruitment process). Whereas the main disincentives to users of health care services have been identified as insufficient drugs/medical supply; congestion/overcrowding in public facilities, time to receive care, and other aspects of disrespectful treatment such as payments of extra fees over and above the normal charges. Given these problems facing the public health care provision it becomes inconvenient and/or wasteful of resources, especially for the poor, trying to access subsidised health care services. It has been shown that very poor quality in public sector is associated with relatively greater usage of private facilities in the squatter area.

In addition, the exemption system does not perform well in providing adequate protection to the poor in the current health care system. Chapter 4 showed that there is a problem of exclusion of the poor from accessing health care services mainly due to high cost of medical services. The main gaps that affect the functioning of the exemption system include limited information/knowledge of the public regarding the exemption system, ambiguity in the criteria of identifying the poor and inadequacy/unreliable services provided to the exempted patients.

There is also conflict of interest between the user fee policy and the exemption policy as applied in public health care facilities. This is because the revenue collected by public health care facilities through user fees plays an important role in facilitation of incentives and operationalisation of these facilities. As a result, providing more exemptions to patients implies less revenue to these facilities. Furthermore, the government has failed to adhere to its initial plan of reimbursing the public health care facilities on the services provided to the exempted patients and this intensifies the existing tension. Therefore, one key solution for the functioning of the exemption system lies in its financing structure, adequacy of services provided and clear procedures for the exemption system.

Notes

1 The exemption categories have been adopted from the cost sharing fact sheet produced by the Ministry of Health in 1999.
7.1 Introduction

The provision of private health care services in Tanzania is shaped and governed by multiple of forces which are operating in the current health care system. The development of these forces resulted from the pressure that exists towards the supplier (providers) in health care provisions and the demand side (users) towards accessing health care services in a highly commercialised health care environment. These forces include a hostile competitive environment between health care providers, inadequate capacity of the government to develop and enforce regulation to ensure provision of sufficient quality of health care services. In addition, low ability of the majority of health care users to finance health care services and the existence of an obstructive payment structure are unsupportive to users of the health care services i.e., a cash at hand payment system and poor health insurance coverage.

The interaction of these forces resulted in the development of informalisation mechanisms towards provisions and access of private health care services especially by the lower tier of the health care system. Theoretically, the informalisation process is explained as a market process characterised by forms of malpractice and/or illegality that arise specifically from poverty interacting with unregulated markets. In this regard, informalisation is a process that results not just as a matter of poverty but also in weaknesses of institutional structure that results in an unregulated health care market (See Figure 7.1).
In this chapter, the term informalisation signifies, ‘lack of enforcement of basic regulatory constraint including registration requirements and supervision; absence of quality assurance in provision of health care services; and at worst a shift of health care into an informal sector of unlicensed, unstable and abusive services and drug sales’ (Mackintosh and Tibandebage 2007; Bloom and Standing 2001; Asiimwe 2003). In this regard, there are a number of aspects to consider when analysing informalisation in the health care enterprises. This ranges from failure to register (complete illegality) to those aspects that contravene to specified rules and regulations for example, problems of understaffing and under-
taking activities that they are not registered to provide. Furthermore, the informalisation also includes those aspects that do not contravene to specific rules but remain intensely problematic. For example, such activities may include buying the cheapest medicines on the market, knowing that you have weak institutional capacity of checking that they are of decent standards and instituting ‘informal’ payment systems, which seems to be willingness to work on credit.

In this regard, informalisation has three parts, *illegality, things that contravene to specified rules and regulation* and *things that do not contravene to specified rules and regulations but are problematic or lack clarity*. The outcome of the informalisation mechanism in providing and accessing health care services is therefore damaging to both users and suppliers of health care services. Tibandebage and Mackintosh (2002, 2005) indicate that the informalisation process leads to poor services of inadequate quality mostly at the lowest–charging facilities, which serve the lowest income group. These facilities often operate with under skilled/ inadequate staff, use of medicines of doubtful quality together with elements of overcharging and patterns of abuse. Therefore informalisation pressure is linked to forces resulting from high incidence of poverty, distinct levels of inequality and the existing payment structure that operates in the unregulated health care market. In this way, the operation of the demand and the supply sides of the health care market respond to these forces. It is possible therefore to view informalisation as a process of compulsion that users and providers of health care services are driven to do given and/or taking advantage of the prevailing circumstances.

This chapter analyses the informalisation mechanism in place by looking at the issue from three main angles: insufficient enforcement on basic regulatory requirements; setting out concepts of formalisation and informalisation through a comparative case study approach. It then analyse the bifurcation mechanisms in quality of services provided as linked to the differences in spatial locations, arguing that competition in lower segment is price-focused while in the upper segment there is evidence of quality competition (see Chapter 2, Section 2.1.3). In this study, the assessment criterion on quality of care is not based on clinical judgement but rather on patients’ and providers’ perceptions. Furthermore, the analysis of the chapter dwells primarily on the qualitative information, whereby selected cases serve as a narrative to provide a human face for the arguments presented.
7.2 Unregulated Health Care Market and Insufficient Enforcement of Basic Regulatory Requirements to Private Sector

Regulation in health sector is defined as ‘a mechanism in which the government controls or deliberately tries to influence the activities of individual or actors in health care provision by manipulating target variables such as price, quantity and quality’ (Maynard 1982; Kumaranayake 2003). It mainly emphasises the licensing (entry) as well as controlling activities of provisioning of care once the health care providers joined the market. A well established regulation mechanism is important to ensure that there is proper control on many problems associated with delivery and financing of health care by the private health care providers (Bennett 1991).

Liberalisation of health care provisions led to rapid growth of private health care providers in Tanzania. However, it quickly became apparent that the government capacity to develop and enforce regulations to ensure adequate quality of care is often extremely limited (Kumaranayake et al. 2003; Soderlund et al. 2000; Mujinja et al. 2003). This rapid expansion of private health care provision is also accompanied by significant movements into and out of the business by the private health care providers which makes it even harder to follow their activities.

The municipal level, through the office of Municipal Medical Officer for Health (MMOH office) is responsible for the registration and supervision of all health care activities within the municipality. The main regulatory activities at this level include enforcing regulations and standards on health care activities; ensuring that the quality of health care services provided are at the desired level; and ensuring adherence of professional conduct and ethics. However, insufficiency in the implementation and enforcement of the basic regulatory requirements appear evident at this level.

The subsections below discuss the main factors that contributed to insufficient regulatory mechanism for health care provisions based on the information obtained from the municipal authority and health care provider interviews.
7.2.1 Inadequate information and knowledge of regulations among health care providers

Inadequate provision of information and knowledge of regulations is among the major obstacles that contribute to the problem of insufficiency in enforcing regulatory interventions. Adequate information flow and proper knowledge on the important regulatory enforcement framework need to be communicated clearly between all actors involved within the health care system—users, suppliers and regulators of health care services. The weak information management system in the current regulatory framework has been attributed to the poor communication structure, lack of supportive and educative regulatory system, and low capacity at the municipal level to secure reliable and up-to-date information.

Poor communication structure

During the interviews, it was revealed that the current system of licensing and supervision is not well communicated to health care providers. There is weak management of information flow from the municipal authority to health care providers and vice versa. All health care providers interviewed acknowledged that they received poor information on the regulatory and supervisory process. They pointed out that they are not adequately aware and/or informed on the requirements of the supervisory process and how it is conducted.

“The system of licensing and supervision needs to be improved. We don’t understand how they organise their inspection and what exactly needs to be done in this exercise.” (Assistant Medical Officer, private not for profit dispensary, squatter area).

Lack of supportive and educative regulatory framework

It was also revealed that although frequency of inspections improved in recent years, the supervision exercise is still conducted in a more authoritative manner rather than being supportive and educative. This exercise would be more useful if combined with delivery of appropriate knowledge and advice on different health care interventions, especially when there is establishment of new regulatory interventions.

“There is a habit of the supervisors from the municipal office to criticise more than to provide useful guidance, education and advice. In the recent
change of sterilisation technique, without involving the ideas of the private sector, they just showed up and started to criticise; instead of providing education on how to go about the newly introduced change in sterilisation method” (Medical Officer in Charge, private for profit dispensary, medium density area).

**Low capacity to secure reliable and up-to-date information about facilities supervised**

An effective supervision process requires the ability to secure reliable and update information about available health care facilities. However, there is a severe problem of securing adequate basic information about the available health care facilities including their location and/or existence and this causes complications in the supervision process. This problem is mainly rooted at the municipal level where they failed to coordinate and ensure the availability of this important information.

This problem arose explicitly during the interviews with one of the municipal officials responsible for health affairs. The officer confirmed that the information regarding the private health care facilities is not updated frequently and even basic information regarding the location and whether the facilities were operational was unreliable or completely unavailable from this level.

“It is easier to supervise the public health care facilities, as their information is available and better organised. The supervision of private facilities is cumbersome and very problematic; this is because the information regarding their location and operation is not updated regularly. Some private facilities are closing down and others are moving to new premises without informing the MMOH office. The correct number of operational private facilities in the municipality is currently not available” (Respondent, MMOH Office, Kinondoni municipality).

However, according to Mujinja et al. (2003), the problem of adequate information is a vicious circle and closely linked to capacity constraints. Without adequate capacity to conduct comprehensive inspections and ensuring a feedback mechanism is in place, locations cannot be verified and therefore inability to update the information system. In addition, there is little incentive for owners of private health care facilities to update and inform the regulators.
7.2.2 Inadequate capacity at the municipal level to enforce regulatory requirements

Insufficient enforcement on basic regulatory intervention is linked to inadequate financial and human resources available at the municipal level to carry out the supervision and regulatory activities effectively. The interviews held with MMOH officials acknowledged a lack of capacity in terms of labour, finance and transport to carry out the regulatory tasks effectively.

“There are about 22 health officers at the MMOH conducting the inspection and supervision activities. Unfortunately, these officers have many other assigned activities. This makes the inspection and supervision enforcement system from the municipal level to the health care facilities weak. In principle, every Monday there is a routine schedule to supervise the specified facilities, however in most cases the schedule is not adhered to. This is either due to transportation problems or the responsible officers have been assigned other tasks” (Respondent, MMOH Office, Kinondoni municipality).

Due to transportation problems and insufficient labour, it has been difficult for the municipal authority to lay down comprehensive schedules (routine supervision timetable) to carry out the regulatory tasks effectively. The whole supervision exercise seemed ad-hoc, and it was not clear what tasks were supposed to be done, when they were to be done and who should do them in this exercise. The aspect of enforcement of penalties involved for those health care providers who do not adhere to the set regulatory principles also seemed poorly enforced.

The information revealed through health care provider interviews confirms the above information obtained from the municipal level. All the health care providers interviewed were of the opinion that to some extent the number of inspection visits increased in recent year, although the main problem still links to the ad hoc nature of the supervisory process and poor feedback on the inspection results.

“The system of licensing and supervision needs to be improved. It is currently very ad hoc and disorganised. We don’t understand how they organise their inspection and we do not get feedback” (In Charge, AMO, private not for profit dispensary, squatter area).

In order to solve the problem of insufficient capacity in enforcing the regulation interventions, the MMOH office is thinking of decentralising
the supervision responsibilities to the ward level. They expect this to be undertaken with labour available at the ward level to carry out the supervisory and regulatory task. However, this idea needs to be taken with caution, as it is important to ensure that financial and human capacity is also improved at this level together with adequate coordination and supervision from the municipal level.

“There is a plan to decentralise the inspection and supervision role to the ward level, as it will be easier for the ward officers to follow-up with the health care facilities and provide a good linkage with the municipal authorities. However, it is still questionable whether there is adequate capacity to carry out these activities at the ward level” (Respondent, MMOH office).

The weak supervision system together with poor enforcement of the set regulatory procedures provides loopholes for development of informalisation mechanisms in provision of health care services. The subsequent section offers confirmation from health care providers that operate against the set regulatory framework.

7.2.3 Health care providers taking advantage of unregulated system

All private health care providers interviewed admitted that the existing regulatory system is weak and therefore it is easier for them to take advantage of the system by operating against the regulations set by the municipal authorities. The degree of taking advantage of the poorly coordinated and supervised private health care provisioning system differs from one health care provider to the next. This also depends on the level and the geographical location of the health care facility. Common practices observed by the researcher as conducted by the health care providers interviewed include operating while understaffed, and offering services, which legally they are not allowed to provide.

“Supervision system should be reviewed and monitor closely the private sector, There is need to have tight regulation on the use of drugs; drugs are carelessly prescribed by the private sector.” (Clinical Officer in Charge, public dispensary, medium density area).

Furthermore, in extreme cases, some providers are operating completely illegally without a licence to operate a health care facility. Emphasising this is the fact that the researcher learned, one of the selected
health care providers, often referenced in the household interviews operated completely illegally. The operation of this facility is further discussed in the subsequent section.

“I have no comment on the system of supervision and licensing; I am not registered and therefore I am not supervised” (Owner of the informal operational dispensary, squatter area).

The health care providers interviewed also pointed out that the weak regulation system provides loopholes on the prevailing behaviour of private drug stores and pharmacies providing services beyond what their licence allows. Some of these facilities allegedly provide services like ordinary dispensaries (i.e. provision of consultation and selling of drugs at the same time) and this poses stiff competition especially to lower level private health care facilities. Usually the consultation services provided by these facilities are free of charge.

“There is a need to have a closer look on the way the private pharmacies and laboratories are operating; most of them are operating just like ordinary dispensaries, prescribing medicines, providing injections and consultations. You just go around this area and you will see yourself that some drug stores even dare to advertise—consultation services also available here.” (In Charge, private for profit dispensary, squatter area).

7.2.4 Unequal supervision missions between health care facilities

The rate of supervision services tend to differ across health care facilities mostly depending on the level and the geographical location of the facility. During the interviews with health care providers, it became evident to the researcher that some private facilities, especially of higher level and those located in non-squatter areas, were supervised more often than private dispensaries located in the squatter area. For example, the two private hospitals interviewed admitted to undergoing inspection at least once a month.

“There is over supervision; without proper feedback; they usually come almost every month this is too much.” (Director, private for profit hospital, low density area).

There was also a striking difference on the rate of inspection between health care facilities of the same level but located in different geographi-
cal areas. The dispensaries located in the low-density area were inspected more often compared to the dispensaries located in the squatter areas.

“The supervision team comes regularly, at least every two to three months we are having a team from the municipal authority to conduct inspection in this facility. Even though the pattern is not systematic that is, conducted in ad hoc nature.” (In Charge, private for profit dispensary, low density area)

However, all the private dispensaries located in the squatter area revealed that despite the fact that the supervision is conducted in unsystematic way but also the rate of visitation is low.

“The inspection is irregular and we do not get supervision reports from them; last year we were inspected twice, this year they promised to come in March but up to now (end of July) we have not heard from them. This has an impact to ensure that the services we offer are up to standard.” (Clinical Officer in Charge, private not for profit dispensary, squatter area).

One possible explanation on differences in supervision visits between these facilities can be associated with demands for unofficial payments (bribes) by the municipal officials during these visits. This is a possibility because the facilities located in non-squatter areas are more financially secure compared to those in squatter areas and hence it can be tempting for these officials using their authoritative influence to demand such payments during these irregular visits.

7.2.5 Poor involvement of consumers in the regulatory process

Consumers of health care services can be an important source of information to ensure that the providers of health care services adhere to the required regulations. If properly designed, the information from users of health care services can provide good feedback on quality of services provided. However, there is no system to ensure users’ feedback on health care services goes into the overall regulatory framework. Furthermore, consumer protection mechanisms related to provision of health care services are weak and not recognised by users of health services especially in the case of negligence or malpractice.

“The community around here is not satisfied with the services provided by private dispensaries. Most of them are in a very bad condition and do not provide the required standard services. For example, they have no reliable water supply and therefore they are not clean most of the time—but
where do we go to report this? I do not know.” (Patient, private for profit dispensary, exit patient interview).

“When we inspect the health care facilities we do not take feedback from the users of health care services provided; this can be a useful source of information to ensure that service provided are up to standard. May be in the future we should consider taking this into account.” (Health Official, MMOH office, Kinondoni municipality).

It is documented in the National Health Policy (URT/MOH, 2003) that Tanzania has the client service charter that is supposed to be renewable each year. The client charter is a social pact between users of health care services and the Ministry of Health as the facilitator of health care provisions. This charter intends to state in detail how to improve awareness of availability and quality of health services delivered to clients. However, the charter remains poorly communicated to the public and therefore its awareness is limited to both users and providers of health care services. The Ministry of Health should enhance the mechanism of using the consumer feedback through improvements in public information systems. A deliberate campaign can help ensure that the public receives clear communication on consumer rights and the government receives information accordingly on the feedback system.

7.3 Underlying Indicators of Formal and Informalisation: Detailed Case Studies in the Lower Segment

The development of an informalisation mechanism in the health care system can progress to an advanced level that leads to development of illegal operations in provision of health care services. It is at this level that some providers manage to take advantage of the largely unregulated health care system and perform completely illegal operations. In these cases, the provision of health care services is provided illegal without being registered and/or monitored by the licensing and regulatory authorities.

Given this scenario, the underlying indicators of formal and informalisation in the health care provision have been analysed. Specifically, this section analyses the mechanism of formal and informal operations in provision of health care services in the squatter area. It looks at how some of the private health care facilities manage to operate relatively formally while others are failing to do so and in an extreme case operat-
ing completely illegally. What factors are pushing these facilities into these two modes of operation? A comparative analysis of two cases of formal and informal dispensaries has been used to analyse these indicators. The illegal/unregistered dispensary serves to analyse factors behind the informal operation while the Catholic dispensary serves to understand the formal operations. These two facilities are both located in the same geographical area, within the squatter area.

The extreme poverty prevailing mostly in the squatter areas accelerates the informalisation mechanism. Poverty is pushing down the income of the facilities located in these areas mainly due to low ability of people to finance adequately their health care needs. Besides this problem, the payment structure of the ‘out of pocket’ payment system does not work favourably for this income group. In this regard, the supply side also has to adjust to the demand side forces and in some cases through taking advantage of the unregulated health care market. Given these circumstances, the private dispensaries in this area (except the Catholic dispensary) manage to cope by using three main indicators: prices, payment structure through provision of credit and behaviour of health care personnel. In this way, they are able to compete and stay in the market. By using these indicators, the illegal dispensary manages to draw away/attract patients from the safer environment of formal operating health care facilities like the Catholic dispensary. The section below explicitly analyses these issues using the selected cases.

7.3.1 Background information on the selected case studies

Background information on the selected cases studies used to examine the underlying indicators of formal and informalisation in provision of health care services are in Boxes 7.1 and 7.2 below. The background information provides a general understanding of the operational status of these facilities.
**Box 7.1**

**Illegal operational private dispensary: Informal operation**

<table>
<thead>
<tr>
<th>How the facility was discovered</th>
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<tr>
<td>The researcher learned about this facility when conducting household surveys for this research work in Kawe squatter area. During the survey, this dispensary was well referred to, especially by the poorer respondents residing in the area. This is why this facility was selected for the health care provider interviews before learning that it is operating illegally without having registered at the municipal authority. It was only after visiting the facility that the researcher realised the facility has not registered and therefore is operating illegally.</td>
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<th>Historical Background</th>
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<td>The facility started its operation in 1997 in a part time arrangement as the in charge (who is also the owner of the facility) was still employed full time as an assistant laboratory technician in another registered private dispensary. The services were conducted only in the evening hours inside the (previous) congested premises of the owner. In 2003, the in charge decided to quit her job and concentrate full time on this business, which expanded and became more demanding. In 2006, the facility moved to the current location (but within same neighbourhood) with larger premises to accommodate the expansion of the business. In these new premises, the in charge managed to hire three rooms in one of the congested houses in the squatter area in which they are used interchangeably, during the day mostly as a health care facility and in the evening as the ordinary living premises for the in charge. Despite the increased demand for the services provided to the poor community around the area, the facility is run single handed by the in charge without assistance from other health care providers.</td>
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<tr>
<th>Overview Of the Illegal Operation</th>
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<tr>
<td>The in charge was well aware that she is running an illegal health care facility, but since she has been in the market for quite some years and people around the neighbourhood have gained some confidence in her services, she did not appear worried about her actions. In the interviews conducted she was quoted saying, ‘Yes, I know what I am doing is not right and this facility is running completely illegal, but people need my services and you will see for yourself that I am cheaper compared to other facilities nearby’ (Owner, Illegal Operational Dispensary, Squatter area).</td>
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The dispensary is trying to operate like any other formal-registered private dispensary although there were major gaps observed in the general condition of the facility including: extreme shortage of health care equipment; poor quality of services offered, absence of health care staff required and poor adherence to ethical standards. The facility did not have a ‘sign board’, which is supposed to indicate the name and address of the facility. However, everyone around the neighbourhood including some officers in the street government seemed to know its existence although it is not clear whether they were aware that it is run illegally.

<table>
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<th>General Look of the Facility</th>
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<td>The general look of the facility is no different from any other residential premise located in the squatter area. The waiting room used for patients is a small sitting room of the owner’s furnished with a few old couches. All the consultation, dressing, admission of patients, laboratory services and injection services are conducted in either one of the two bedrooms of the house. In addition, the facility does not have running water and electricity. Many patients were observed attending this dispensary regularly, as most of them appeared to have an exercise book, which keeps their medical records. Patients were also observed to be comfortable as seen in any other formal private dispensary located in the neighbourhood.</td>
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CHAPTER 7

Box 7.2
Catholic dispensary: Case of a formal operational dispensary
in the squatter area

About the Facility
This facility was well mentioned by household members and health care providers around
the squatter area during the household survey and the health care providers’ interviews.
People around the neighbourhood mainly refer to this facility as ‘Kwa masista’. The facility
is located within the Catholic Church premises in Kawe Mzimuni (squatter area) along the
main road. The facility started its operation in 1990 under the ownership and management
of the Irvea Sisters Congregation of the Roman Catholic Church. Generally the facility has
been perceived to provide very good quality health care services

Overview of the General Operations of the Facility
Generally, the facility seemed in very good condition in terms of premises and availability
of basic infrastructure compared to other private dispensaries from around the area. The
premises were clean, spacious and well structured. The facility has a reliable water supply
through a borehole and has adequate water reserve tanks. The electricity supply is also
very reliable; the facility has a generator in case of power shortage.

The facility has 15 staff (two clinical officers, nine nurses of different levels, one labora-
tory assistant and three supporting staff). There were two staff (nuns) in management
positions working in the facility but their living costs came directly from the congregation
and not the income generated by the facility. The facility provides all basic curative ser-

7.3.2 Informalisation indicators: Case of the illegal operational
dispensary

Illegal provision of health care services has a direct negative impact on
the quality of services provided. These facilities are operating without
following most of the guideline’s standards (if any) governing the provi-
sion of health care services. In this case there is no mechanism in place that will enforce unregistered providers to ensure adherence to ethical standards and hence safety of services provided.

By looking at the case of an illegally operating dispensary, it is obvious to see that the quality of care provided by this facility is very low. The findings from this facility indicate poor adherence to ethical standards on almost all key elements of health care provisions and therefore there is tremendous negative impact on the quality of services provided.

This case study exposed an extreme case of running a private dispensary with only one health care personnel. That is, an extreme case of under qualified/understaffed operations. An assistant laboratory technician, who struggled to do all the work, consultations, laboratory work, injections, dress wounds and the overall administration of the facility runs singlehandedly. This arrangement made it hard for her to accomplish all these tasks effectively especially considering she was not qualified/trained to do all these tasks. Early in the morning, the facility becomes crowded with many patients waiting to receive services.

“The consultation process took a long time – more than two hours to see the doctor.” (Female, 19 years old, exit patient interview, illegal operational dispensary, squatter area).

The researcher observed that the dispensary did not have proper laboratory equipments/facilities. The laboratory tests were conducted in the bedroom of the incharge. In this room, there was one old microscope together with some reagents, stored in an old cupboard. Furthermore, the facility lacked electricity and running water to perform these services effectively. The drug stock and storage facilities were shallow and in a very poor condition. There were neither proper shelves nor a refrigerator for storing drugs in this facility. The in-charge also revealed that she is trying to get the cheapest drugs available in the market in order for her clients to be able to afford them.

“The problem is I do not have a refrigerator I cannot store some of the drugs; my stock is also very small as my capital is also small.” (In Charge, illegal operational dispensary, squatter area).

In another extreme case, the facility was also providing illegal admission to very ill patients who required extended observation. Both patients and owner of this facility revealed this fact. The admission is taking place in one of the bedrooms of the incharge of the facility. This practice
is extremely risky and unethical, as neither the facility nor the owner has the professional capacity to handle such cases.

“My spouse was admitted to this dispensary for three days. The cost was 19,000 Tsh. Also, our son was once admitted to this same dispensary.” (Male, 59 years old, household survey, squatter area).

Indicators of Informalisation: The question asked here is what makes people seek health care services in this type of facility given other available choices of sources of care? This case study revealed that the main reasons that facilitate the informalisation mechanism from the demand and supply sides to include affordable/suppressed prices, flexible payment structure, profit maximisation, ‘extra’ friendliness attitude of the health care provider and existence of network of informal activities within the health care system.

(i) Costs and Prices
Given the high incidence of poverty among the clientele around the squatter area, and the existing payment structure, the private health care facilities are trying to compete on prices by keeping them as low as possible in order to attract more customers. By operating illegally, this dispensary has been able to operate at the lowest cost and hence keep its prices very low compared to the normal price range charged by other private dispensaries located in the squatter area. For example this dispensary is run by one person and this makes the cost for salaries to be very minimal. Lower prices make the services offered more affordable to the poorer clientele and therefore increase the demand for services. The prices offered by this facility were lowest compared to other private dispensaries (See Chapter 5, Table 5.8).

The woman in charge of the illegally operating dispensary said the following about the presence of high demand for her services due to low prices offered.

“People around this area need my services and especially those with young children. My prices are very low and I allow them to pay at the end of the month in case they do not have the money at the time they need my service…. Yes, in a way I am trying to charge very low prices than other private dispensaries around the area to attract more clients.” (Owner, illegal operational dispensary, squatter area).
Regarding the users of the illegal services, some of them knew that they were seeking services from an unregistered dispensary while others seemed completely unaware. However, they were all of the same opinion that the prices of the services offered by this facility were less compared to other nearby private dispensaries and that the owner is a nice person as she is always there to help and listen to their health problems.

“It does not matter to me if this facility is not registered. I always bring my family here and the services are affordable.” (Respondent, exit patient interview, illegal operational dispensary, squatter area).

“The premise of this facility is a bit odd not like any other dispensaries it does not have a signboard, proper laboratory, hospital beds etc., but the services are provided at a very low cost” (Respondent, exit patient interview, illegal operational dispensary, squatter area).

(ii) **Flexibility of payment structure through informal credit system**

The payment system offered by this facility is informal and very flexible to accommodate fluctuation and low level income of the poorer clientele. The informal credit system (i.e. deferment of payment practices) developed to facilitate the poor to finance their health care needs easily. There was evidence of this kind of arrangement in most of the lower level private health care facilities in the squatter area. The system works in such a way that the patients (who mostly come around the neighbourhood) are entering into a mutual relationship/agreement with health care providers so that they can receive health care services at time of need with the promise of paying for the services in the future, typically towards the end of the month. This agreement is informal and based on the concept of trust between the provider and the user of health care services. Furthermore, this type of arrangement is also important for the providers of health care services in order to attract and keep their share of customers.

“The charges are also affordable here compared to other dispensaries. I do not make much money, so I know if I get sick I can come here as they allow to treat on credit.” (Male, 28 years old, exit patient interview, illegal operational dispensary, squatter area).

“It is common to provide credit especially to my regular customers—I register their names and they bring the money mainly towards the end of
the month—I cannot afford to provide exemption I need to cover my costs.” (In Charge, illegal operational dispensary, squatter area).

“While our son was sick, we did not have enough money to cover the medical expenses. She told us to bring the money after a week—he was treated and given the medicines.” (Male, 54 years old, household survey, squatter area).

(iii) Extra friendly behaviour of health workers

The owner of this facility was very much aware of the unacceptable illegal operation of the facility, and therefore she takes the extra effort to be friendly to attract and gain the confidence of her clients.

“The facility is much cheaper and the in charge has a reputation of being very polite to patients compared to other dispensaries around the area” (Male, 51 years old, illegal operational dispensary, squatter area).

“The doctor here is very polite and talks very well to her patients.” (Male, 28 years old, exit patient interview, illegal operational dispensary, squatter area).

“I spend a lot of time listening to their problems and being nice to them. I have to keep my customers.” (Owner, illegal operational dispensary, squatter area).

(iv) High incentive “profit maximisation”

There is a high incentive for this facility to operate illegally. The performance of the illegal operation enabled this facility to operate at the lowest cost possible, with maximum profit, while jeopardising the standard and safety of the services offered. For example, having only one health care worker running the facility has made it possible for the facility to save money in salaries for the required number of staff.

The facility is therefore taking advantage of the weak regulatory system to maximise profit through informal activities. The facility operates freely without interference from the authorities and therefore there is no external pressure to formalise their activities. It has operated since 1997 without official investigation or intervention.

(v) Network of informal health care provision

The existence of informal activities by private health care providers (including the illegal operation) has also been made possible by the informal
support system that developed amongst different private service providers in the current health care market. Some service providers take advantage of the weak regulatory system in place to support each other in the operation of informal activities. For example, the unregistered facilities manage to prescribe drugs to patients to purchase in the formal drug stores. During the interviews, the woman in charge of the illegal dispensary was observed to prescribe different types of drugs to patients for them to purchase in nearby pharmacies even though technically she was not qualified to do so. She was prescribing drugs on an ordinary piece of paper for patients to procure at the nearby drug stores. The patients also confirmed that they were able to procure drugs from the nearby drug stores using these plain sheets of paper signed by the assistant laboratory technician.

“Yes, the doctor has prescribed me some antibiotics that I need to buy in the drug store. There is not any problem, what they need at the drug store is only the name of the drug and they will sell it to you. I have done this before using this type of prescription sheet.” (Patient, exit patient interview, illegal operational dispensary, squatter area).

Unregistered facilities also manage to refer their patients to other formal health care facilities. The woman in charge of the unregistered facility revealed that she was able to refer patients to other health care facilities of different levels in both public and private sectors. In referring a patient, she either writes the report on a plain piece of paper or takes the patient to the referral facility provided if the patient covers the transportation cost. The presence of these informal networks within the formal system of health care provisions enable these unregistered facilities to operate easily within the system. This link further indicates the presence of a wide spread informalisation mechanism within the health care system.

7.3.3 Formalisation indicators: Case of the Catholic dispensary

One argument here is that extreme poverty reduces the income of lower level private health care facilities (mainly serving the poor) due to the low ability of users to finance decent health care services. However, the selected Catholic dispensary has been managing to provide formal and quality health care services to the poor in the squatter area. The main questions that this section seeks to address are how does this facility manage to stay formal and provide decent services? How do they resist
the pressures just outlined? What are the forces behind this achievement given the income (poverty) levels of the clientele they serve and the low level of basic infrastructure available in the squatter area as offered by the municipal authority? In all the interviews conducted around the area, people had a good opinion about the quality of services offered by this facility.

“They provide good medical treatment and advice. Most dispensaries do not usually tell you what you are suffering from, but here they always inform you. This is important because most people around this neighbourhood are not educated and we need to be educated on matters such as health care.” (Female, 28 years, exit patient interview, Catholic dispensary, squatter area).

“The services are very good and workers are polite. The drugs they provide are of good quality and most often people are cured faster when they are treated here. They do good laboratory tests compared to other dispensaries.” (Female, 37 years, exit patient interview, Catholic dispensary, squatter area).

“The services at the public dispensary is usually slow and there is always a long queue. So, to avoid this, when we have money, the family decides to go to ‘kwa masista’. The services at this dispensary are very good.” (Male, 30 years old, household survey, squatter area).

“The services provided in this facility are of very good quality, the facility is well kept and clean. People trust quality of their services.” (Female, 35 years, exit patient interview, Catholic dispensary, squatter area).

Unlike the case of the informally operating dispensary, the payment structure of the Catholic dispensary is not as flexible to accommodate the deferment of payments; it does not entertain treatment on credit. If need be, they would rather provide the patient with a full or partial exemption. Earlier discussion indicates that prices at this facility are not comparably higher to other private dispensaries in the area (See Chapter 5, Table 5.8). This position could imply that those patients who are able to pay (with cash at hand) from this poorer neighbourhood would opt to go to the Catholic dispensary and access decent quality services while the really poor (without cash at hand) would choose one of the remaining options with lower quality of care but offer payment deferment.

“We do not like to entertain treatment on credit— it is hard to follow them up. We would rather opt for exemption. We need to keep the facility
Informalisation Mechanism: Response to Poverty

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Availability of basic infrastructure

Unlike other private dispensaries around the area (including the illegal dispensary), this facility has access to adequate infrastructure over and above what is being provided by the municipal authorities. For example, the facility was observed to have adequate supply of water and electricity. The facility has a borehole and good water storage facilities in case of emergency. It has been able to secure a standby generator to be used during power fluctuations and/or shortages. The additional investment on basic infrastructure has been possible through support they receive from the Catholic congregation.

7.4 Bifurcation on Quality of Private Health Care Services: Does Level and Geographical Location Matter?

This section examines the bifurcation mechanism in place and its impact on quality of health care services provided by the private sector. It is specifically looking at the differences in quality of services provided by private health care providers from different geographical locations with distinct welfare levels in both squatter and non-squatter areas. In this regard, the section analyses whether the geographical location of the health care facility matters in influencing provision of good quality health care services. The hypothesis here is that the poor go to the lower level of care that is affordable (given their income and existing payment structure) but with poor quality services, while the better off are able to access good standard facilities offering better quality services but at a higher cost that the poor cannot afford.

This section uses a comparative analysis of two private dispensaries located in two different geographical locations to analyse differences in key aspects of quality of services provided. Of these two selected health care facilities, one is a private dispensary located in the heart of the squatter area while the other is a private dispensary located in the middle of the low density area. In addition to these two facilities, this section also makes use of information from other facilities to elaborate some points further. The findings reveal a striking difference in the quality of care provided by these two facilities of the same level but in different geographical locations.

This difference is explicable by the fact that geographical location matters in determining the nature of competitiveness that the health care
facility faces from other providers located in the same area. As noted in the informalisation section, the private dispensaries located in squatter areas are facing competition mainly on prices and the flexibility of payment structure or, through provision of informal credit system. They are struggling to keep their prices as low as possible, in some cases through compromising quality of services. However the nature of competition is different in facilities located in low-density areas serving the better-off (including private hospitals). There is evidence from this study that the competition among facilities in the better off area operates to some extent through quality competition. That is, the facilities find it profitable to seek to attract people from their competitors, not by lowering prices, but by offering an enhanced quality of service (see Chapter 2, Section 2.1.3). The types of quality which their customers are regarded as valuing, and willing to pay for, include cleanliness, range of medicines (notably provision of brand name medicine regarded as more reliable), adequate skilled labour and range of services provided.

Quality of care provided is analysed in this section through consideration of perceptions from both demand and supply side. On the demand side, data comes from the household survey and exit patients interviews while on the supply side from provider interviews. Furthermore, as indicated earlier, quality of care assessments come from patient and provider perceptions not clinical judgment. The following aspects of quality of care have been analysed to determine segmentation in provision of quality care from private health care providers from different geographical locations.

7.4.1 Staff: Availability and competence

The competence and availability of health care workers strongly influences the quality of care provided by a health care facility. Currently, there is a severe shortage of human resources for the health care market in Tanzania. This is a national health policy issue, which requires immediate attention. This issue is also widely discussed in current policy debates (See Proceedings of Annual Health Sector Review, URT-MOHSW 2007b). The problem of a staff shortage is evident in the facilities visited in both public and private sectors. However, its impact was different across different level of facilities and depending on their geographical location.
This study indicates that in most lower-level facilities visited, the number of health care workers available were below the minimum required, according to the guideline standards for health care facilities. However, this condition seemed severe in the private facilities located in high-density areas compared to those private facilities of the same level but located in low-density areas. The guideline standards for health facilities stipulates that at the dispensary level, there should be at least one Assistant Medical Officer (AMO) spending a minimum of two hours twice a week, one clinical officer, one trained laboratory assistant and three nurses (midwife, public nurse and MCH aide) operating full time at this level (URT-MoH 1996). However, of the seven private dispensaries interviewed, two had an AMO as a part time supervisor of the facility. These are two private dispensaries located in a better-off neighbourhood, which mainly serves people from around that area.

Box 7.3 below compares the availability and competence of staff available between two private dispensaries, one located in the better-off neighbourhood and the other located in the squatter area.

**Box 7.3**

*Difference in competence and availability of staff between two dispensaries*

<table>
<thead>
<tr>
<th>Dispensary: Low Density Area</th>
<th>Dispensary: High Density Area (Squatter Area)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Staff: 13</td>
<td>Total Staff: 6</td>
</tr>
<tr>
<td>1 Assistant Medical Officer (AMO) - Supervisor</td>
<td>1 Clinical Officer - Supervisor</td>
</tr>
<tr>
<td>3 Clinical Officers</td>
<td>1 Clinical Officer - Part time</td>
</tr>
<tr>
<td>1 Nursing Officer</td>
<td>3 Nursing Assistants</td>
</tr>
<tr>
<td>2 Nurse Midwives</td>
<td>1 MCH Aide</td>
</tr>
<tr>
<td>1 MCH Aide</td>
<td>1 Pharmaceutical Assistant</td>
</tr>
<tr>
<td>1 Accountant</td>
<td>1 Laboratory Assistant</td>
</tr>
<tr>
<td>1 Laboratory Assistant</td>
<td>1 Laboratory Assistant</td>
</tr>
</tbody>
</table>

When comparing the two private dispensaries referred to in Box 7.3 above it is clear that the dispensary in the low-density area has more adequate and competent staff available for health service provisions. This dispensary has 13 staff compared to only six at the dispensary located in
the squatter area. The dispensary located in the low-density area has more than the required minimum number of staff as stipulated by the guideline standards for health care provisions. However, the dispensary located in the squatter area is severely understaffed and does not meet the criterion of minimum number of staff required to operate at the dispensary level. For example, this dispensary has neither an Assistant Medical Officer (AMO) nor any nursing officers (i.e. registered nurse, midwife, public health nurse) as required by law.

During the interviews, those in charge of the two facilities selected in Box 7.3 above, had the following comments regarding the availability and competence of staff in their facilities.

“For better qualified/well experienced health care workers it is hard to find/hire them, as they are not interested in lower wages. It is also hard to find someone who is dedicated to the job and who will be with you even when the facility is experiencing financial pressure” (Clinical Officer in Charge, private dispensary, squatter area).

“This facility does not experience many problems with payment of medical bills. We do not allow payment in credit. In this case, we can afford to hire and keep good competent staff and their salaries are also better compared to other private dispensaries.” (Assistant Medical Officer in Charge, private dispensary, low density).

The problem of understaffing was evident at the private hospital level as well. However, compared to lower level facilities, the staff here is of relatively higher calibre. The medical officers in charge of the two private hospitals interviewed also indicated that there is severe shortage of staff in the current health care market. In this case, the cost of hiring and maintaining higher-level competent staff is very high.

“I would like to have four Medical Officers (MDs), and six Assistant Medical Officers (AMO) but it is hard to get them and also very expensive to keep them. At the moment, I have only half of the required professional staff. The problem is how to get them and also how to pay them, many prefer to work for the government sector, as the pay is good and there is more opportunity for further training. We do have shortage of staff” (Medical Officer in Charge, private for profit hospital).

In order to ensure the availability of specialists in the private hospitals, the management of these hospitals have special arrangements with various medical specialists, in such a way that they run some clinics in
their facilities but split the revenue gained from the services provided. The hospitals also benefit from other services provided by having these specialists around such as pharmacy and laboratory services. Furthermore, in responding to this problem the officer in charge of one of the private hospitals interviewed revealed that they are in the process of establishing a nursing school, which will benefit the hospital in two ways. Production of competent nurses and interns that can be utilised by the hospital and the trainers can teach while working at the hospital. In this way, the hospital will be able to save the costs of maintaining and hiring the required staff for hospital purposes. However, the challenge is where are they going to secure additional staff (especially competent trainers) to manage the expansion of these activities. At the moment they are operating with half of the required staff and they are facing problems in securing the required number of staff.

7.4.2 Staff: Unprofessional behaviour and attitude towards patients

Lack of professional attitude

Overall, the attitude and behaviour of private health care providers towards patients and amongst themselves appeared pleasant. The private sector is highly competitive and therefore unpleasant attitudes and behaviour are not entertained, as they will drive customers away. In all private health care facilities (especially the dispensaries), most of the patients interviewed shared the same opinion that the health care workers have a pleasant attitude towards patients.

“The workers here are very polite and really care about patients. And if there is a time when you do not have enough money, they agree to defer payments.” (Female, 37 years old, exit patient, private dispensary, squatter area).

“Good quality of care, health care workers are polite and attentive. We usually bring my employer’s children here.” (Female, 22 years old, exit patient, private for profit hospital).

“My whole family has been coming here for a very long time. The treatment, the services, the nurses and doctors are all good, nice and qualified.” (Male, 18 years old, exit patient, private for profit hospital).
“I'm satisfied with the medical care provided at this dispensary. They are polite and attentive.” (Female, 28 years old, exit patient, private dispensary, squatter area).

The main problem observed was a lack of professionalism behaviour especially by workers at private dispensaries located in squatter areas (with exception of the Catholic dispensary). During the interviews, some health care workers in these facilities were observed to behave in an unprofessional manner, which is unacceptable in a health care facility and directly impacts services provided. In some of the facilities visited, health care workers were found listening to music on the radio, talking and laughing loudly to each other. During one of the visits to the private (not for profit) dispensary located in the squatter area, the assistant laboratory technician had four visitors (young men) from around the neighbourhood talking, smoking cigarettes and listening to loud music in the laboratory room.

“I am very sorry for the inconvenience, those were my friends from around the area who came to visit me; many young people around the area are unemployed and they are looking for places to hang around.” (Assistant Laboratory Technician, private not for profit dispensary, squatter area).

**Unprofessional practices**

There are some elements of unprofessional practices conducted in the current private health care market. Over-prescribing and unnecessary laboratory tests were the most common unprofessional behaviours practiced in private health care facilities. Half of all health care providers interviewed indicated that this behaviour is common among private health care providers. The private providers are well aware of the weakness of the regulatory system and decided to take advantage of it as they struggle to survive in the market. This situation increases the temptation to conduct these unethical practices. All four private dispensaries interviewed located in the squatter area (with exception of the Catholic dispensary) confirmed the practice of these unethical elements as necessary for market survival. Furthermore, the facilities located in non-squatter areas also confirmed that they are aware of these practices. However, they did not reveal whether they also take part in such practices.

For example, in one private dispensary interviewed (located in the squatter area), the officer in charge of the facility revealed that to survive
in the market they mainly depend on the sale of drugs and the income they generate from laboratory services. In this regard, they are sometimes tempted to overprescribe or conduct unwanted laboratory tests to generate more income.

“This is very easy to happen, like in our facility the main source of income is from selling drugs and laboratory services; this is how we make our living. The temptation is there to over prescribe or conduct unnecessary tests, though we are controlling it. Many facilities around here practice this in order to raise their income” (In Charge, private for profit dispensary, squatter area).

Overcharging is another practice used by some private health care providers to increase their income. One of the private not for profit dispensary (located in squatter area) interviewed indicated to practice an overcharging system for some of its patients in order to raise the facility’s income. The officer in charge of this dispensary argued that over prescribing and provision of unnecessary laboratory tests is extremely unethical, and they cannot do that. Therefore as their surviving mechanism, they tend to charge their patients differently for the same type of services provided. Those patients who appear better off are charged more than those who appear poorer. They look at welfare indicators such as quality of dress, possession of expensive mobile phones, and means of transportation to determine the patient’s ability to pay.

“In this facility, we neither overprescribe drugs nor conduct unnecessary laboratory tests. We find this to be extremely unethical. Instead, we overcharge those whom we think are able to pay more (to make extra money) compared to those who are able to pay less.” (In Charge, private not for profit dispensary, squatter area).

7.4.3 Drugs: Quality and availability

Quality of care provided is closely linked to the availability and quality of drugs provided by the health care facility. In private health care facilities, the magnitude of these problems is different depending on the level, ownership and geographical location of the facilities. During the interviews with health care providers, all private dispensaries located in the squatter area, (with exception of the Catholic dispensary) were observed struggling balancing provision of minimum acceptable quality of drugs with lower prices that the community can afford to pay. In order for
these facilities to compete and stay in the market, they have to search and offer the cheapest brands of drugs available that can be affordable to their clients. In this way, they are also attracting market for drugs of indecent standard by knowing that the regulation system is weak and therefore there is a limited possibility of cross checking the standard of drugs they are offering.

The researcher observed that these facilities have problems securing and financing adequate stocks of drugs. Most of them did not have a refrigerator and were only able to store very limited types of drugs. The situation in the Catholic dispensary was different as they had a wide stock of drugs with three refrigerators for storage purposes i.e. one for vaccines, one for drugs and one for laboratory reagents.

“On availability, we do experience shortage though not very often, the problem is that we do not have enough capital to store a variety of drugs and also we do not have a refrigerator. Quality of drugs we offer is also not very satisfactory as we are forced to buy the cheapest brands on the market; this is what our clients can afford.” (In Charge, private for profit dispensary, squatter area).

“We are not really satisfied with the quality of drugs we offer. There are so many brands of drugs available and of different quality. But for the prices that we are charging, we are forced to purchase the cheapest brands available. Also, our capital and turnover is low so we cannot afford to have large stock with variety of drugs.” (In Charge, private not for profit dispensary, squatter area).

“Our drug storage is very shallow. We cannot afford to stock different types of drugs and the quality of drugs that we have is poor. We do experience drug shortages once in a while, but this is not a problem as our patients can purchase drugs for almost similar prices from the nearby pharmacies.” (In Charge, private for profit Dispensary, squatter area).

In contrast, the higher-level private facilities and those private dispensaries located in low-density areas have minimal experience on the above-mentioned problems. The main challenge for them was to search for good and effective brands of drugs in the market. In this regard, they are forced to store different brands of drugs (to be sold at different prices) in order to serve different levels of clientele. These facilities have adequate drug storage and proper facilities for storing drugs i.e. refrigerators, good shelves and generators in case of shortage of electricity.
“Our drug stock is very good; we have a system to ensure that all necessary drugs are available. If there is increased demand for a certain type of drugs maybe due to cholera, we increase our stock. We also have an excellent storage for our drugs.” (In Charge, NFP, Catholic dispensary, squatter area).

“Our drug stock contains more than 1000 types of drugs; the problem is we cannot find one supplier who can supply us with all of them; we have to use different suppliers.” (In Charge, private for profit hospital, non squatter area).

“We need to keep even better brands especially those from Europe; these days, people are willing to pay more for good brands and not those drugs from Kenya and India.” (In Charge, private for profit health centre, squatter area).

“The availability and quality of drugs we provide is good, we stock what we actually need; we also run a pharmacy therefore it is not easy to run out of drugs” (In Charge, private for profit dispensary).

“Our stock is quite good and we offer a variety of drugs. We also try to keep good quality drugs from known brands, which also makes our prices higher” (In Charge, private not for profit hospital).

Pictures 1 and 2 below indicate a striking difference in drug storage facilities between the two private for profit dispensaries. The private dispensary for profit located in the squatter area has only one old, poorly stocked cupboard (Picture 1). The officer in charge of this facility revealed that they cannot afford to stock a variety of drugs due to lack of capital. They stock only the very basic medicines and try to restock almost on a daily basis. The private for profit dispensary located in a better-off neighbourhood has very good facilities and a wider stock of drugs. The drug storage room has nice aluminium shelves with a refrigerator (Picture 2).
7.4.4 General condition and cleanliness of the facilities

The general condition and cleanliness of a health care facility connects to the quality of services provided directly. The facilities that are in poor condition in terms of premises, equipment and general cleanliness in most cases are unable to offer good quality care. The qualitative observations from health care provider interviews indicate that most lower-level
facilities located in high-density neighbourhoods (with the exception of the Catholic dispensary) were not in satisfactory condition. The financial constraints faced by the majority of these facilities as well as the failure of basic infrastructure in squatter settlements by the municipal authority such as, water supply and sanitation facilities is likely to accelerate this situation. This has an important market effect, which depicts the failure of the municipal authority to deal with providing necessary infrastructure to facilitate smooth provision of health care services.

This section analyses the general condition and cleanliness of the facilities based on the three main indicators: availability of running water, condition of the toilet facilities, and condition of wards, consultation and resting rooms.

Inadequate supply of water

The problem of inadequate water supply appeared primarily in facilities located in the squatter area. All four private health facilities located in the squatter area (with the exception of the Catholic dispensary) had no running water inside their facilities. Furthermore, these facilities did not have enough water tanks to store water nor a sufficient water pipe system to distribute water inside these facilities. In general, supply of water to these facilities seemed unreliable. The main water source for these facilities is through local water vendors, the safety of which is uncertain.

In general, the cleanliness condition of all the facilities that did not have running water was poor. The most affected areas in these facilities were the toilets and the laboratory. In all these facilities, the laboratories appeared dirtier than facilities with running water. The officer in charge of these facilities revealed that it is difficult to keep these facilities clean under these circumstances and that they lack adequate finances to invest in a proper supply of water.

“We do not have enough capital to invest in water supply; it is a big headache as without adequate supply of water it is very hard to keep this dispensary clean.” (In Charge, private for profit dispensary, squatter area).

“I do not have running water inside this dispensary, I just store water in these buckets over here—and I buy water from the local water vendors around the area. I am not very sure where they get this water from, but I believe it is safe.” (In Charge, illegal dispensary).
Toilet facilities

All the facilities interviewed provided toilet facilities to clients. However, the condition of the toilet facilities provided was different from one facility to the next. Toilets in public facilities were not clean, mainly because of patient congestion. The situation was almost the same for the private dispensaries located in squatter areas with exception of the one owned by the Catholic Church.

Inadequate water supply was the main problem that accelerated the poor condition of toilets located in squatter areas. The pictures below provide a comparison of toilet facilities at two dispensaries, one located in a squatter area without adequate water supply and the other one located in the low-density area with adequate water supply. Pictures 3 and 4 below show the toilet facility of the dispensary located in the squatter area to be in a very poor condition. From the pictures, it is clear that the toilet is dirty and there is no water supply inside the toilet. Picture 4 shows that, in order to deal with the water problem, buckets of water have been put outside the toilet (most of them were empty) for the patients to help themselves. The situation is different in the dispensary in the better-off area. Picture 5 indicates that in this dispensary, the toilet facility is in good and clean condition. There are water pipes supplying water inside the toilet and in addition, they have a bucket full of water inside the toilet for those who want to use it.

Picture 3: Toilet Facility, Private Dispensary, Squatter Area
Condition of wards, consultation and resting rooms

The condition of wards and consultation rooms in high-level private facilities (hospitals and health centres) together with dispensaries located in low density areas appeared relatively clean. In all these facilities, the rooms had clean tiled floors and the beds seemed good. The main problem was observed in the private dispensaries located in the squatter area.
with the exception of the Catholic dispensary. In these facilities, the condition of resting and consultation rooms was poor. In most cases, these rooms were not clean, but dark (with insufficient light) and noisy. Most of the resting beds lacked clean sheets or mosquito nets. In addition, the condition of the floor in terms of quality and cleanliness was poor.

Pictures 6, 7 and 8 below show the condition of resting and consultation rooms in one private dispensary in the squatter area. The pictures show that the condition is pathetic in terms of cleanliness and the poor state of available equipment. The injection room in this facility appears to be extremely dirty and does not have a water supply. Picture 7 indicates that water is stored and supplied from a big bucket with a tap kept inside the room.

The situation was quite different in the private dispensary located in the better-off neighbourhood (See Picture 9). In this facility, the rooms were in a very good condition, spacious, clean and with a good ventilation system. The condition of the floor was also very good; the rooms have a tiled floor, which was also clean.
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Picture 7: Condition of the Injection Room, Private Dispensary Squatter Area

Picture 8: Condition of the Injection Room, Private Dispensary Squatter Area
Picture 9: Condition of the Resting Room, Private Dispensary Squatter Area

7.5 Summary: Key Findings

This chapter provides the following key findings:

- The current health care market is characterised by an informalisation mechanism towards provision and access of private health care services. The informalisation process is a market mechanism, which results in a response to poverty interacting with an unregulated health care market. This process signifies aspects of illegality (failure to register) aspects that contravene to specified rules and regulations, and those aspects that do not contravene to specific rules but are nevertheless problematic. The outcome of this process is damaging as it leads to provision of poor services of inadequate quality mostly at the lowest charging facilities serving the poor; the impact is primarily felt in the squatter areas, that is, in the lower income segment of the health care market.

- The existence of an informalisation mechanism therefore results in the bifurcation of conditions in provision of quality health care
services by the private sector. The extreme poverty and highly competitive environment in private health care provisions has an impact on reducing payments especially to those facilities mainly serving the poor community. These facilities are therefore struggling to balance between their survival in the market given their low income and poor payment structure for the clientele they serve. As a result there is bifurcation on the quality of services offered by private health care providers depending on the level of the facility and geographical location (welfare levels) of the clientele they serve. In addition segmentation mechanism on quality of care provided is also accelerated by failure to provide decent infrastructure in the squatter settlement by the municipal authorities.

- As a result, the nature of competition is observed to be different between private facilities at different levels and also located in different spatial locations. The facilities in squatter areas compete mainly on prices, behaviour of personnel and the flexibility of the payment structure through provision of informal credit. Meanwhile the facilities located in non-squatter areas (including higher levels of care) find it profitable to compete more on quality and level of technology. These factors include cleanliness, range of services provided, and brand name medicines.
Conclusion: Existence of a Segmented Urban Health Care Market

This study reveals the existence of a segmentation mechanism in the provision and utilisation of health care services in the urban health care market. The segmented health care market is the result of a systemic process of interaction of the demand and supply sides of the commercialised health care system with widespread urban poverty. The study indicates that the urban health care market has segmented into a two-tier system making it difficult for the poor to access better health care services: a better quality, upper tier of care for those who can afford it and; a lower tier of inexpensive health care services of generally inadequate and/or doubtful quality mainly for the poor. The public health care provisioning system does not function effectively in providing adequate protection for the poor to access adequate health care services. This is mainly because the liberalisation of health care services that led to greater plurality of service provisions in urban areas has weakened the pattern of public health care provisions, in particular, the primary health care units. This study therefore puts forward important policy contributions that involve access to health care services in a context of widespread urban poverty.

This study concludes that the health care reforms in practice resulted in a powerful mechanism of social exclusion of the urban poor from accessing decent health care services instead of being inclusionary to the poor as intended by policy. The following are the key contributions as put forward by this study.

Analytical contribution: A two-way relationship in the segmentation mechanism

The segmentation of the urban health care market is the result of the interaction between a high incidence of poverty and the health care sys-
tem. This has been analysed using the three key aspects of the health care system functioning: access to care in conditions of severe poverty; the operation of pricing and payment structure; and the role of public provision and regulation and the process of informalisation. Each aspect has been investigated as an element of the interplay between health system institutional design and financing, the behaviour of health care providers and people’s health seeking behaviour. A two-way relationship is the model used to express this analytical contribution. One, poverty instigates segmentation in the health care market (See Chapter 2, Figure 2.7). Poverty shapes (in a segmented manner) the health seeking behaviour (demand side) and provision (supply side) of health care services. Poverty brings about inequality and a diversified portfolio of livelihood assets in society. Given the highly commercialised health care market, the unequal distribution of livelihood assets has a major influence on the ability to secure health care services among different welfare groups in society. In this way there is a formation of segmentation on the pattern of health care seeking behaviour and ultimately on the utilisation of health care services (See results in Chapter 4, Section 4.3). On the supply side, poverty influences the ability of health care facilities to finance the required health care services adequately. This is because the provision of health care services depends heavily on the capacity of users to finance the provided health care services (See results in Chapter 5, Sections 5.2 and 5.4). In this regard, the weak/fragmented health insurance system and heavy reliance on out of pocket payments leads to unequal capacity of users to finance health care services largely from out of pocket spending and hence segmentation in provision of adequate and quality health care services.

Second, once the health care market segments, a feedback mechanism leads to further intensification of the poverty incidence (See Chapter 2, Figure 2.8). On the demand side, the existence of the commercialised health care system and unequal ability of users to finance health care services results in exclusion and/or access to poor quality health care services, which in turn contributes to a high incidence of poverty. As seen in Chapter 4, Section 4.4, the poor often fail to access decent health care services due to inability to pay, a weak protection mechanism in the public health care system and weak pooling/insurance mechanism. In this way, users of health care services, especially the poor, are forced to develop various coping strategies to access health care services. On the
supply side, the segmented health care market results in an informalisation mechanism in provision of health care especially in the lower segment in order to respond to differential pressures in the segments of the market. This process impacts the quality of care provided to the poor, and therefore an intensification of poverty incidence (See Chapter 7, Sections 7.3 and 7.4).

**Methodological contribution: Multi-layer structure of the units of analysis in the household survey**

This study put forward an in-depth research method required to analyse the systemic interaction between poverty incidence and the way it shapes the operationalisation of health care systems. The household survey carried out for this study has been the core component of this research, designed carefully to enable exploration of the existing interrelationship between poverty, health seeking behaviour and utilisation of health services. The careful choice of the study area and the overall design of this survey further capture the effect of spatial dynamics in the accessing of health care services. Furthermore, the household survey adopted a unique *multi-layered structure* of the units of analysis that enabled the investigation of systemic behaviour and outcomes. This structure went beyond the level of households and individuals within them to include additional layers, which then nested the set of distinctive units of analysis *household, individuals, illness episodes and visits*. In this structure all individuals within each household were surveyed, all illness episodes relating to all ill persons in the household (in the past three months) were covered, and all visits relating to each episode were also covered (See Chapter 3, Section 3.3).

Furthermore, this multi-layered structure of analysis provides an additional methodological contribution as opposed to the limited structure adopted in many surveys that intend to collect data on health, including the 2001/2002 Tanzania Household Budget Survey (HBS). For health data, the 2001/2002 Tanzania HBS only collected information up to the individual level regardless of the number of episodes/visits subjected to the particular individual during the surveyed period. In this regard, the information gathered on the pattern of utilisation of health care services from 2001/2002 Tanzania HBS remains unclear. In addition, the triangulation method used in this research sought to analyse the aspects of provision and utilisation of health care services efficiently and effectively.
The triangulation of the results from different angles enabled the exploration of the interactions between institution and regulatory mechanisms, facility behaviour and household behaviour that produce health care access outcomes in context (See Chapter 3, Section 3.3).

**Empirical Contributions**

**Link between poverty, spatial dynamics, HSB and access to health care services**

This study reveals that there is a close relationship between poverty, spatial location, health seeking behaviour (HSB) and access to health care services. The individual’s spatial location and wealth differentiation influences their health seeking behaviour and hence access to health care services. Different spatial locations have a diverse availability of key infrastructure and individual wealth levels, and this affects the way health care markets work in these locations (See Chapter 3, Section 3.7 and Chapter 4, Section 4.2). The households located in squatter areas (Mzimuni[1] and Ukwamani) are more deprived of basic infrastructure (including health care services) compared to those households located in non-squatter areas (Mlalakua and Mzimuni[2]). There is also a close relationship between the distribution of the poor and spatial location. In Chapter 3, Table 3.13, evidence indicates that the majority (80%) of the poorer households covered in the survey is located in a squatter area. This study therefore concludes that where you live and what you possess matters in accessing decent health care services.

The pattern of health seeking behaviour and utilisation of health care services depicted in this study indicates the existence of a segmentation mechanism in the health care market. This segmentation mechanism is influenced by the household’s spatial location and its welfare level, which in turn affects the health seeking behaviour at this level. This study found that poorer households, especially those located in squatter and medium density areas rely heavily on the services provided at the dispensary level, particularly on the services provided by private dispensaries (See Chapter 4, Table 4.7). The lower utilisation by the poor of services offered by public dispensaries relative to private dispensaries is due to the inadequacy of public health care provisions (See Chapter 6, Section 6.1). However, the health seeking behaviour of individuals from better-
Conclusion: Existence of a Segmented Urban Health Care Market

off households is different, as they predominantly utilise the better services provided by private hospitals (See Chapter 4, Section 4.3.2).

Furthermore, there is a substantial problem of not consulting health care providers when individuals fall ill or, exclusion from access to health care services. Of all the reported illness episodes, 30 per cent did not consult any health care provider when ill/injured. This problem affects mostly individuals from poorer households, particularly those located in squatter and medium density areas (See Chapter 4, Tables 4.15 and 4.16). The elderly group is also highly affected. Table 4.17 indicates that out of all the reported illness episodes from the elderly group, nearly half (48%) did not consult any health care provider.

In addition, the main reasons for not consulting health care providers when ill/injured differ across welfare levels. For the poor, this problem mainly stems from the high cost of accessing care and as a result, the poor abstain from care or, self medicate as an alternative way of saving the medical expenses. On the other hand, for individuals from better-off households cost does not play a major role in abstaining from care, but rather the convenience of self medication option in saving time or the wait and see option, to see how the illness progresses. In Chapter 4, Table 4.19 it is indicated that of the individuals from the poorer group who did not consult any health care provider when ill, 46 per cent did so because it is expensive whereas the figure was only nine per cent for individuals from the better-off group.

Furthermore, the cost and the quality of care were observed to be the key determinants in the choice of health care provider to both the better off and the poor. However, the trade-off between both these elements – cost and quality- differs depending on whether the household is poor or better off. The better off generally consider the cost and quality at the hospital level, while the poor consider this mainly at the dispensary level. In addition, the magnitude of welfare level across different groups is also influence the trade-off between these two dimensions: costs and quality. That is , in making the decision to choose a health care provider, the poor are more influenced by cost, while the better-off are influenced more by quality (See Chapter 4, Table 4.21).
Pricing and payment structure influencing segmentation mechanism

The pricing behaviour of facilities and the payment process greatly influence the segmentation mechanism currently affecting the urban health care market. Pricing is the core element of interaction and that causes segmentation in the health care market. The interaction of the pricing process with poverty and the whole organisation of the health care system explain how the segmentation process occurs in the health care market within the demand and the supply sides and in the market interaction between demand and supply. The level, sector and geographical location of the health care facility are the main factors shaping the price structure on the supply side. Whereas the main influence on the demand side is the ability to pay for health care services given the existing payment structure (See Chapter 5, Section 5.2).

Furthermore, there is bifurcation of the payment structure by social class from the demand side of the health care market. This is mainly due to diverse capacity of users to finance health care services. An out of pocket payment system dominates the current payment system with the main source of financing coming from the household resources across all welfare levels, but more prominently for poorer and middle level households. In Chapter 5, Table 5.9 indicates that out of all the visits made to health care providers, 80 per cent were financed through out of pocket payments from resources within the household level. Overall payment through the employer and other arrangements play a minimal role in financing care services. The few individuals benefiting from these arrangements mainly come from better-off households. In this way, individuals from poorer households who are struggling to cope with the existing payment structure have to develop various copying strategies to access health care services. These include deferment of payment, requesting assistance from close relatives/friends and compromising expenditure on other basic needs (See Chapter 5, Section 5.4.3).

The behaviour of facilities on the supply side of the health care market tends to undermine the provision of adequate and quality health care services, taking into account diversified ability of users in financing health care services and very low coverage of the existing insurance system. The supply side has therefore developed diversified strategies to cope with a bifurcated payment structure. The suppliers of health care services, particularly the private dispensaries serving the majority of the
poor, face a significant challenge surviving in a highly competitive market and providing services to the poor. In this way, they are forced to develop strategies that will enable them to survive in the market and maintain their client share through accommodating inconveniences brought by an out-of-pocket payment system. These strategies include deferment of payment and fee reduction largely in the lower segment, and overpricing and abuse of the existing insurance system particularly in the upper segment (See Chapter 5, Section 5.5).

Outflow of the poor from public health care facilities

The incentives problems and associated institutional gaps in public health care provisions instigate the outflow of the poor from public health care facilities. The inadequacy in public health care provisions restrict demand for public health care services and therefore leads to outflow especially of the poorer from the public sector. In this regard, the excess demand mainly falls to the lower level private health care providers or leads to exclusion in accessing health care services that is, foregoing treatment with the risk of long-term deterioration of their health status. The main disincentives that affects the performance of health workers and hence contribute to the outflow of the poor from utilising public health care services were identified as; severe shortage of human resources for health; poor infrastructure/working condition (including weak referral system); and organisational and supervision aspects( which also include weaknesses at the municipal level planning, staff training and recruitment process). Whereas the main disincentives to users of health care services have been identified as insufficient drugs/medical supply; congestion/overcrowding in public facilities, long time to receive care and other aspects of disrespectful treatment such as payments of extra fees over and above the normal charges (See Chapter 6, Section 6.1). Given these problems facing the public health care provision it becomes inconvenient and/or wasteful of resources, especially for the poor, trying to access subsidised health care services. It has been shown that very poor quality in public sector is associated with relatively greater usage of private facilities in the squatter area.

In addition, the exemption system does not perform well to provide adequate protection of the poor in the current health care system. The main gaps that affect the exemption system include limited information/knowledge of the public regarding exemption system, ambiguity in
the criteria of identifying the poor and inadequacy/unreliable services provided to the exempted patients. Furthermore, there is also a conflict of interest between the user fee policy and the exemption policy as applied in public health care facilities. This is because the revenue collected by public health care facilities through user fees plays an important role in the facilitation of incentives and operation of these facilities. As a result, providing more exemptions to patients implies less revenue to these facilities. The government also failed to adhere to its initial plan of reimbursing the public health care facilities for services provided to exempted patients and this intensifies the existing tension (See Chapter 6, Section 6.2).

Informalisation mechanism and unregulated health care market

The current health care market is characterized by presence of informalisation mechanism towards provision and access of private health care services especially in the lower segment. The informalisation process is a market mechanism, which results from a response to poverty interacting with an unregulated health care market. This process signifies aspects of illegality (failure to register), aspects that contravene specified rules and regulation, and those aspects that do not contravene specific rules but are nevertheless problematic. The outcome of this process is damaging as it leads to provisions of poor services of inadequate quality mostly at the lowest charging facilities serving the poor.

This study revealed that there is insufficient implementation and enforcement of basic regulatory requirements in the current health care system. There is inadequate information and knowledge of regulation mechanisms provided to users and providers of health care services. The regulatory system is also poorly designed to be supportive/educative to the providers of health care services that is, it is more authoritative in nature. Furthermore, there is also inadequate capacity at the municipal level to enforce the regulation requirements. This links to the inadequacy in financial and human resources available at the municipal level to carry out the supervisory and regulatory activities effectively. All health care providers interviewed for this study admitted that the current regulatory system is weak and therefore it is easier for them to take advantage of the system by operating against the regulations set by municipal authorities. In addition, the rates of supervisory services also tend to differ across health care facilities depending on the level and geographical loca-
Conclusion: Existence of a Segmented Urban Health Care Market

The lower level facilities and especially those located in the squatter areas were more disadvantaged in the supervision process (See Chapter 7, Section 7.2).

The existence of an informalisation mechanism also results in bifurcation in provision of quality health care services by the private sector. The quality of services offered by private health care providers depends on the level of the facility, geographical location and welfare levels of the clientele they serve. Comparative analysis in Chapter 7, Section 7.4 reveals that lower level facilities and especially those located in squatter areas were of a lower quality especially in terms of: staff availability and competence; lack of professionalism in attitude and practices; inadequate quality and availability of drugs; inadequacy in basic infrastructure; and poor general cleanliness of the facilities. Furthermore, the nature of competition is also different between private facilities of different levels and located in different spatial locations. The facilities in squatter areas are competing mainly on prices, behaviour of personnel and the flexibility of the payment structure through provision of informal credit, while the facilities located in non-squatter areas (including private hospitals) compete more on quality and level of technology for example, cleanliness, range of services provided, and provision of brand name medicines. The existence of an informalisation mechanism provides loopholes for some facilities to operate completely illegally (without registration) and this provides high incentives for these facilities in terms of profit maximisation as it allows the facility to operate at the lowest cost possible while jeopardising the standard and safety of the services offered. Furthermore, the existence of informal activities especially by private health care providers (including the illegal operation) has been possible due to presence of an informal support system developed by different players in the current health care system (See Chapter 7, Section 7.3).

Policy implication

The design of policies dealing with improving access to health care services in the urban context needs to consider the aspect of segmentation mechanism prevailing in the current health care system in order to reshape policy outcomes. This is because the bifurcation of the urban health care market into a two tier system intensifies exclusion and access to decent quality of services for the poor. The segmented system weak-
ens the voice and alliance of the poor to articulate their needs, mainly due to the exit of the better off from utilisation of services from the lower segment of the market. Therefore, given the severity of urban poverty and the growing levels of inequality, deliberate policy measures need to ensure that the poor in urban settings are not excluded from accessing decent health care services in the current commercialised health care market.

The challenge of improving access to decent health care services in the current structure needs also to take into account poverty level and the dynamics of spatial characteristics affecting the provision and health seeking behaviour of the urban community. There is need for basic infrastructure improvements including health care services in squatter areas in order to reduce the burden of diseases and access to health care services for the poor. Furthermore, even though the development of the private sector advanced furthest in urban areas and private providers are operating alongside the public health care providers, this does not guarantee access for the poor to both public and private health care facilities. There is a substantial problem of exclusion in access to health care services and therefore deliberate policy measures need to be in place to ensure that the poor (and especially women and the elderly) are included in the process. The out of pocket payment structure is shown to be a major hurdle in provision and access of good quality health care. Efforts should be made to expand coverage of national health care insurance schemes and other forms of insurance that can be applicable in the Tanzanian context.

There is a need to enhance the current efforts dealing with incentives and the institutional gaps facing the public health care provision. The public health care system should provide a fallback position especially for the poor to access health care services. The improvement in public health care provisioning is also important because it has a direct impact on the improved overall health care regulation system and hence, the provision of private health services. The following main areas need to be considered for improvement in the public sector: supply of human resources for health care, improved infrastructure and medical supplies, the referral structure, the municipal level planning process and enhanced management of the public-private mixed health care delivery system. Furthermore, the public exemption system needs review to provide adequate protection to the poor. There should be adequate information to
the public regarding the exemption system, clear criteria for identification of the poor and adequate services provided to exempted patients. The initial plan of reimbursing the public health care facilities for exempted services by the government requires re-examination. This will improve the functioning of the exemption process and ease the conflict of interest between the user fee policy and the exemption policy as revealed by this study.

Finally, this study also recommends substantial improvements to the supervision process and enforcement of basic regulatory requirements. Users and providers of health care services need adequate information regarding the regulation mechanisms in place in order to improve adherence on the set regulation and ethical standards. There is also a need to improve capacity at the municipal level, mainly in terms of human and financial resources, to carry out supervision and regulatory activities effectively. The improvement of regulatory mechanism is important to control the informalisation mechanism prevailing in the current urban health care setting and that is damaging to provisions of quality health care services.
Appendices
Appendices

Appendix I

Research Permit

KINONDONI MUNICIPAL COUNCIL

ALL CORRESPONDENCES SHOULD BE DIRECTED TO THE MUNICIPAL DIRECTOR

Tel.: (255) 2711022

To reply please quote
Tel. No.: (255) 2711022
Vol. No.: V 1995

TO
WHOM IT MAY CONCERN,

KINONDONI MUNICIPALITY

RE: RESEARCH PERMIT:

Ms. Tumini M. Kila (07398453100)

The above mentioned is a student planning her M.A program in Development Economics at the Institute of Social Studies (ISS) of Hague, Netherlands. She has been given permission to conduct her research on the "HEALTH SECTOR FINANCING & DELIVERY" in this Municipality, starting from 18/04/2006.

Kindly provide her with the necessary assistance in order to enable the performance of her activities comfortably.

Best wishes,

[Signature]

Dr. Jafath K. H. Amoir
(Research Coordinator)

Kinondoni Municipal Council

Copy: To above mentioned Candidate.
Appendix II
Household Questionnaire

TITLE: HEALTH CARE FINANCING AND DELIVERY IN TANZANIA: INCLUDING THE URBAN POOR?
The Case of Kawe Ward, Kinondoni Municipal in Dar es Salaam

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- HOUSEHOLD QUESTIONNAIRE
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PHD RESEARCH PROGRAMME, INSTITUTE OF SOCIAL STUDIES (ISS), THE HAGUE, THE NETHERLANDS

Questionnaire Number _____________________________
Date of Interview ________________________________
Name of Interviewer _______________________________

Location:
(i) Ward _______________________________________
(ii) Street _______________________________________
(iii) House Number _______________________________

(Interviewer to provide a brief description of the research and the intended interview)

Would you be willing to be interviewed?
(a) Yes
(b) No

(IF YES, PROCEED WITH THE INTERVIEW - IF NO, STOP THE INTERVIEW)
## PART 1: THE HOUSEHOLD ROSTER

<table>
<thead>
<tr>
<th>ID</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAME OF THE MEMBERS OF THE HOUSEHOLD</td>
<td>Is [NAME] …male or female?</td>
<td>What is the relationship of [NAME] … to the head of the household?</td>
<td>How many months has … [NAME] … been living in this household out of the past year?</td>
</tr>
<tr>
<td>1</td>
<td>male: 1 female: 2</td>
<td>Head: 1</td>
<td>Spouse: 2</td>
<td>Write number of months, from 0 to 12</td>
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<tr>
<td></td>
<td></td>
<td>Son/daughter: 3</td>
<td>Step son/daughter: 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grandchild: 5</td>
<td>Father or mother: 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sister or brother: 7</td>
<td>Niece or nephew: 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Son/daughter-in-law: 9</td>
<td>Brother/sister-in-law: 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Father/mother-in-law: 11</td>
<td>Other relative of head or of his/her spouse: 12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Servant/makubaliano: 13</td>
<td>Servant/mkataba: 14</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tenant/boarder: 15</td>
<td>Adopted/foster/step child: 16</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Co-wife: 17</td>
<td>Other unrelated person: 18</td>
<td></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>NAME</th>
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<th>IN RESIDENCE</th>
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<tr>
<td>NAME</td>
<td>CODE</td>
<td>CODE</td>
<td>MONTHS</td>
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<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>NAME OF THE MEMBERS OF THE HOUSEHOLD</td>
<td>05</td>
<td>06</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>Is this person to be considered a member of the household for survey purposes?</td>
<td></td>
<td>How old is [NAME] in years?</td>
</tr>
<tr>
<td></td>
<td>(Refer Question 01) Determine whether a person is to be treated as household member: Criteria for ‘yes’ and ‘no’ a person should be considered a household member if he/she has lived in the household for at least 3 months in the last 12 months prior to the survey. And household members away to school Yes: 1 No: 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>NAME</td>
<td>MEMBER TEST CODE</td>
<td>AGE YEARS</td>
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<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
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<tr>
<td>4</td>
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PART 2: HOUSEHOLD CHARACTERISTICS

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<tbody>
<tr>
<td><strong>NAME OF THE MEMBERS OF THE HOUSEHOLD</strong></td>
<td>What is the present marital status of [NAME].</td>
<td>Has [NAME] ever attended or is he/she attending school?</td>
<td>What is the highest grade in school that [NAME] completed?</td>
</tr>
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<td>(Refer Question 01)</td>
<td>Married/Monogamous: 1</td>
<td>YES: 1</td>
<td>Koranic: 1</td>
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<td></td>
<td>Married/ Polygamous: 2</td>
<td>NO: 2</td>
<td>Not Yet In School: 2</td>
</tr>
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<td></td>
<td>Partner/Co-habiting: 3</td>
<td></td>
<td>Pre School: 3 / Std 1: 4</td>
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<tr>
<td></td>
<td>Divorced: 4</td>
<td></td>
<td>Std 2: 5 / Std 3: 6 / Std 4: 7</td>
</tr>
<tr>
<td></td>
<td>Separated: 5</td>
<td>Koranic: 1</td>
<td>Std 5: 8 / Std 6: 9 / Std 7: 10</td>
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<td></td>
<td>Widow/widower: 6</td>
<td></td>
<td>Course After Primary Education: 11 / Form I: 12</td>
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<td></td>
<td>Never married: 7</td>
<td>YES: 1</td>
<td>Form II: 13 / Form III: 14 / Form IV: 15</td>
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<tr>
<td></td>
<td></td>
<td>NO: 2</td>
<td>Course After Secondary Education: 16 / Form V: 17</td>
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<td></td>
<td></td>
<td>Form VI: 18 / Course After Form VI: 19</td>
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| | | | Diploma Course: 20 /
| | | | Other Certificate: 21 /
| | | | University Degree: 22 /
| | | | Adult Education: 23
| | | | No Education: 24

<table>
<thead>
<tr>
<th>NAME</th>
<th>MARITAL STATUS</th>
<th>EVER SCHOOL</th>
<th>SCHOOLING</th>
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| 1
| 2
| 3
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| 7
| 8
Among the children who are less than 18 but above 7 years of age living in this household, is there anyone who is supposed to be in school and is currently not in school or attending school?

<table>
<thead>
<tr>
<th>ID</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME OF THE MEMBERS OF THE HOUSEHOLD</td>
<td>Can [NAME] read and write Swahili?</td>
<td>Among the children who are less than 18 but above 7 years of age living in this household, is there anyone who is supposed to be in school and is currently not in school or attending school?</td>
<td>Why [NAME] not currently in/attending school? (Refer to Question 11)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NAME</th>
<th>READING IN SCHOOL</th>
<th>NO SCHOOLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**PART 3: HOUSEHOLD WEALTH INDICATORS**

<table>
<thead>
<tr>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the main source of water for drinking and everyday use for your household?</td>
<td>What kind of toilet facility does your household have?</td>
<td>What are the main materials used in the roof?</td>
<td>What are the main construction materials used in the wall?</td>
<td>What are the main materials used in the floor?</td>
</tr>
<tr>
<td>Piped water inside: 1</td>
<td>Piped water outside: 2</td>
<td>Public tap: 3</td>
<td>Well water within residence: 4</td>
<td>Outside/public well: 5</td>
</tr>
<tr>
<td>River/stream/pond/Lake/dam/spring: 6</td>
<td>Rain water: 7</td>
<td>Water vendors: 8</td>
<td>Other (specify): 9</td>
<td></td>
</tr>
<tr>
<td>Flush toilet: 1</td>
<td>Improved pit latrine: 2</td>
<td>Traditional pit latrine: 3</td>
<td>River/canal: 4</td>
<td></td>
</tr>
<tr>
<td>No toilet: 5</td>
<td>Bush/field: 6</td>
<td>Other (specify): 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roof from natural materials: 1</td>
<td>Rudimentary roof: 2</td>
<td>Corrugated iron roof: 3</td>
<td>Tiled or concrete roof: 4</td>
<td></td>
</tr>
<tr>
<td>Other (specify): 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wood/grass: 1</td>
<td>Wood/clay: 2</td>
<td>Corrugated iron sheet: 3</td>
<td>Unprocessed clay bricks: 4</td>
<td></td>
</tr>
<tr>
<td>Processed clay bricks: 5</td>
<td>Concrete or cement blocks: 6</td>
<td>Other (specify): 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mud/clay: 1</td>
<td>Cement: 2</td>
<td>Tiles/ceramic/timber: 3</td>
<td>Other (specify): 4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source of water</th>
<th>Toilet facility</th>
<th>Roof</th>
<th>Wall</th>
<th>Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Bicycle</td>
</tr>
<tr>
<td>Television: 3</td>
<td>Biogas: 3</td>
<td>Paraffin lamp: 3</td>
<td>Candles/ firewood: 4</td>
<td>Car/Truck</td>
</tr>
<tr>
<td>Telephone: 4</td>
<td>Bottled gas: 4</td>
<td>Candles/ firewood: 4</td>
<td>Candles/ firewood: 4</td>
<td>Saving/Current Account</td>
</tr>
<tr>
<td>Refrigerator: 5</td>
<td>Paraffin lamp: 3</td>
<td>Candles/ firewood: 4</td>
<td>Candles/ firewood: 4</td>
<td>YES: 1</td>
</tr>
<tr>
<td>Iron: 6</td>
<td>Animal dung: 8</td>
<td>Other (specify): 7</td>
<td>Other (specify): 7</td>
<td>NO: 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Fuel for cooking</th>
<th>Source of lighting</th>
<th>Ownership</th>
<th>Meals</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES: 1</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Bicycle</td>
<td>Number of meals</td>
</tr>
<tr>
<td>NO: 2</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Mopcycle/Scooter</td>
<td></td>
</tr>
<tr>
<td>YES: 1</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Car/Truck</td>
<td></td>
</tr>
<tr>
<td>NO: 2</td>
<td>Electricity: 1</td>
<td>Electricity: 1</td>
<td>Saving/Current Account</td>
<td></td>
</tr>
</tbody>
</table>
In the past week, on how many days did the household consume meat?

<table>
<thead>
<tr>
<th>Days consumed meat</th>
<th>Never: 1</th>
<th>Seldom: 2</th>
<th>Sometimes: 3</th>
<th>Often: 4</th>
<th>Always: 5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes: 1</td>
<td>No: 2</td>
<td>I don’t know: 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How often in the last year did this household have problems in satisfying the food needs of the household?

Meat | Food needs |
|-----|------------|

Does your household own this dwelling (house)?

<table>
<thead>
<tr>
<th></th>
<th>Yes: 1</th>
<th>No: 2</th>
<th>I don’t know: 3</th>
</tr>
</thead>
</table>

In case of emergency, do you have anybody who can lend you money?

<table>
<thead>
<tr>
<th></th>
<th>Yes: 1</th>
<th>No: 2</th>
<th>I don’t know: 3</th>
</tr>
</thead>
</table>

### Sources of income

<table>
<thead>
<tr>
<th>Item</th>
<th>27</th>
<th>28</th>
<th>29</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sources of income</td>
<td>What is the most important source of income?</td>
<td>Who earns the first most important source of income?</td>
<td>Who earns the second most important source of income?</td>
</tr>
<tr>
<td>List</td>
<td>1 = first most important source of income 2 = second most important source of income</td>
<td>Please explain your answer in detail provide name(s), position within the household and any other important information (see also codes used in qn 3)</td>
<td>Please explain your answer in detail – provide name(s), position within the household and any other important information (see also codes used in qn 3)</td>
</tr>
<tr>
<td>1</td>
<td>Crop production</td>
<td>Codes:</td>
<td>Codes:</td>
</tr>
<tr>
<td>2</td>
<td>Livestock</td>
<td>Explanation:</td>
<td>Explanation:</td>
</tr>
<tr>
<td>3</td>
<td>Fishing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hunting/beekeeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Poultry</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Farm wage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Other agricultural activity (specify)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Wage in a parastatal/government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------------------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>9</td>
<td>Wage earner in a private sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Monetary savings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Pensions from private sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pensions from government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Property (rentals)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Self-employed in own business</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Mining</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Remittance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Payment in kind (gratuity, bonuses etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Other non-agricultural income (specify)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### PART 5: HEALTH SEEKING BEHAVIOUR AND FINANCING

<table>
<thead>
<tr>
<th>ID</th>
<th>30</th>
<th>31</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the members of the household</td>
<td>Was [name] sick or injured in the last 3 months?</td>
<td>If yes no [30] then how many illness episodes was [name] involved in the past 3 months?</td>
<td>What sort of sickness/injury did (name) suffer in the first episode?</td>
</tr>
<tr>
<td>(Refer question 01)</td>
<td>Yes: 1</td>
<td>One: 1</td>
<td>Fever/malaria: 1</td>
</tr>
<tr>
<td></td>
<td>No: 2</td>
<td>Two: 2</td>
<td>Diarrhoea: 2</td>
</tr>
<tr>
<td></td>
<td>I cannot remember: 3</td>
<td>Three: 3</td>
<td>Accident: 3</td>
</tr>
<tr>
<td></td>
<td>I don’t know: 4</td>
<td>More than three: 4</td>
<td>Dental: 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Sick/injured</th>
<th>Episodes</th>
<th>First episode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID</th>
<th>33</th>
<th>34</th>
<th>35</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of the members of the household</td>
<td>What sort of sickness/injury did (name) suffer in the second episode?</td>
<td>What sort of sickness/injury did (name) suffer in the third episode?</td>
<td>Is there any member of the household suffering from chronic illness?</td>
<td>If yes qn [35] what type of chronic illness does name suffer from?</td>
</tr>
<tr>
<td>(Refer question 01)</td>
<td>Fever/malaria: 1</td>
<td>Fever/malaria: 1</td>
<td>Yes: 1</td>
<td>Cancer: 1</td>
</tr>
<tr>
<td></td>
<td>Diarrhoea: 2</td>
<td>Diarrhoea: 2</td>
<td>No: 2</td>
<td>Heart problem: 2</td>
</tr>
<tr>
<td></td>
<td>Accident: 3</td>
<td>Accident: 3</td>
<td>I don’t know: 3</td>
<td>Hiv/aids: 2</td>
</tr>
<tr>
<td></td>
<td>Dental: 4</td>
<td>Dental: 4</td>
<td></td>
<td>Diabetes: 4</td>
</tr>
<tr>
<td></td>
<td>Skin condition</td>
<td>Skin condition</td>
<td></td>
<td>Repeated fever: 5</td>
</tr>
<tr>
<td></td>
<td>Eye, ear, nose or throat: 5</td>
<td>Eye, ear, nose or throat: 5</td>
<td></td>
<td>Other, specify: 6</td>
</tr>
<tr>
<td></td>
<td>Respiratory: 6</td>
<td>Respiratory: 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hernia: 7</td>
<td>Hernia: 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cesarean: 8</td>
<td>Cesarean: 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, specify: 9</td>
<td>Other, specify: 9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Second episode</th>
<th>Third episode</th>
<th>Chronic illness</th>
<th>Type chronic illness</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please create codes of illness episodes based on answers from question 31 – 36, start with non-chronic illness first, then chronic illness. List non-chronic illness of each person first, then go to the next person (e.g., Jamima E1, jamima E2, asha E1.) After this do the same for chronic illness (e.g. Asha C1, juma C1, juma C2.)

<table>
<thead>
<tr>
<th>Code illness episode</th>
<th>Name ID</th>
<th>Name of the household members involved in the illness episode</th>
<th>Description of illness/injury by episode [ref qn –32, 33, 34 and 36]</th>
<th>How many days of work/school did [name] miss due to this illness episode?</th>
<th>Did [name] consult a health provider or traditional healer for this illness/injury?</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>Fever/malaria: 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes: 1</td>
</tr>
<tr>
<td>Diarhoea: 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No: 2</td>
</tr>
<tr>
<td>Accident: 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>I cannot remember: 3</td>
</tr>
<tr>
<td>Dental: 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skin condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye, ear, nose or throat: 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respiratory: 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiv/aids: 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hernia: 9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cesarean: 10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cancer: 11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heart problem: 12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hiv/aids: 13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes: 14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeated fever: 15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other illness, specify: 16</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other chronic illness, specify: 17</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ID illness episode</th>
<th>ID</th>
<th>Name</th>
<th>Illness by episode</th>
<th>Days missed</th>
<th>Consult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code illness episode</td>
<td>43</td>
<td>44</td>
<td>45</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>If no in [qn 42] why did [name] not use medical care for this illness/injury?</td>
<td></td>
<td></td>
<td>If yes [qn 42] what kind of health provider did [name] first see for this illness episode?</td>
<td>Please provide name of the facility for qn [44]? Why did you choose this facility ref qn [45]?</td>
<td></td>
</tr>
<tr>
<td>No need: 1</td>
<td>Too expensive: 2</td>
<td>Too far: 3 Bought drugs from pharmacy: 4 Other, specify: 5</td>
<td>Public dispensary: 1 Private dispensary: 2 Private health centre: 3 Public health centre: 4 District hospital: 5 Private hospital: 6 Public hospital: 7 Private dental clinic: 8 Traditional healer: 9 Spiritual healer: 10 Pharmacy: 11 Missionary dispensary: 12 Missionary health centre: 13 Missionary hosp: 14 Other, specify: 15</td>
<td>Distance/close/closest to home: 1 Quality of care is good: 2 Quality of care is adequate: 3 Cost: cheap/cheaper: 4 Drugs available/likely to be available: 5 Health workers qualified: 6 Health workers polite/attentive: 7 Have a relationship with a health worker: 8 Other, specify: 9</td>
<td></td>
</tr>
<tr>
<td>Id illness episode</td>
<td>No consult</td>
<td>Type of facility</td>
<td>Facility name</td>
<td>Choosing facility</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>47</td>
<td>48</td>
<td>49</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td><strong>illness episode</strong></td>
<td>Did [name] have any problem at the time of the visit to the first provider for this illness episode?</td>
<td>How much in total was paid for her/his visit to the first health care provider for this illness episode – cost including consultation, drugs, laboratory and transport i.e. Including drugs bought elsewhere?</td>
<td>Who paid for her/his visit to the first health care provider for this illness episode?</td>
<td>If household member paid the bill ref qn 49 please specify the relationship to the head of the household</td>
<td></td>
</tr>
</tbody>
</table>
| (Refer question 37) | Yes: 1  
No: 2  
I cannot remember: 3 | Household member: 1  
Other relatives: 2  
Friends: 3  
Insurance organisation: 5  
Community arrangement: 6  
Employee: 7  
Other, specify: 8 | Head: 1  
Spouse: 2  
Son/daughter: 3  
Step son/daughter: 4  
Grandchild: 5  
Father or mother: 6  
Sister or brother: 7  
Niece or nephew: 8  
Son/daughter-in-law: 9  
Brother/sister-in-law: 10  
Father/mother-in-law: 11  
Other relative of head or of his/her spouse: 12  
Servant/makubaliano: 13  
Servant/mkataba: 14  
Tenant/boarder: 15  
Adopted/foster/step child: 16  
Co-wife: 17  
Other unrelated person: 18 |
<p>| <strong>Amount Tshs</strong> | Who paid first visit | Household member |
| | | |
| | | |
| | | |</p>
<table>
<thead>
<tr>
<th>Code</th>
<th>Illness episode</th>
<th>51</th>
<th>52</th>
<th>53</th>
<th>54</th>
<th>55</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Please provide name of the household member who paid the bill.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Please provide any other details related to questions 49-51</td>
<td>If name made a second visit to another health care provider for this illness episode, where did she/he go?</td>
<td></td>
<td></td>
<td></td>
<td>Why did you choose that facility? (refer question 54)</td>
<td>Did [name] have any problem at the time of the visit to the second provider for this illness episode?</td>
</tr>
</tbody>
</table>

(Refer question 37) (Refer question 50) [Open ended see paper attached]

<table>
<thead>
<tr>
<th>51</th>
<th>52</th>
<th>53</th>
<th>54</th>
<th>55</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance: close/closest to home: 1</td>
<td>Quality of care is good: 2</td>
<td>Quality of care is adequate: 3</td>
<td>Cost: cheap/cheaper: 4</td>
<td>Drugs available/likely to be available: 5</td>
<td>Health workers qualified: 6</td>
</tr>
<tr>
<td>Health workers polite/attentive: 7</td>
<td>Have a relation with a health worker: 8</td>
<td>Other, specify: 9</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>51</th>
<th>52</th>
<th>53</th>
<th>54</th>
<th>55</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes: 1</td>
<td>No: 2</td>
<td>I cannot remember: 3</td>
<td></td>
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</tr>
</tbody>
</table>

[open ended see paper attached]

<table>
<thead>
<tr>
<th>Name</th>
<th>Choice second visit</th>
<th>Name second visit</th>
<th>Choice second visit Code</th>
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<tbody>
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<tr>
<td>Code</td>
<td>Illness episode</td>
<td>57</td>
<td>58</td>
</tr>
<tr>
<td>------</td>
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<tr>
<td>How much in total was paid for her/his visit to the second health care provider for this illness episode – cost including consultation, drugs, laboratory and transport i.e. including drugs bought elsewhere</td>
<td>Who paid for her/his visit to the second health care provider for this illness episode?</td>
<td>If household member paid the bill (ref. qn. 58) please specify the relationship to the head of the household</td>
<td>Please provide name of the household member who paid the bill.</td>
</tr>
<tr>
<td>58</td>
<td>59</td>
<td>60</td>
<td>61</td>
</tr>
<tr>
<td>Household member: 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other relatives: 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends: 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neighbours: 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance organisation: 5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Community arrangements: 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employer: 7</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Other, specify: 8</td>
<td></td>
<td></td>
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<tr>
<td>Head: 1</td>
<td>Spouse: 2</td>
<td></td>
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<tr>
<td>Son/daughter: 3</td>
<td>Step son/daughter: 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grandchild: 5</td>
<td>Father or mother: 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sister or brother: 7</td>
<td>Niece or nephew: 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Son/daughter-in-law: 9</td>
<td>Brother/sister-in-law: 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father/mother-in-law: 11</td>
<td>Other relative of head or of his/her spouse: 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tenant/boarder: 15</td>
<td>Adopted/foster/step child: 16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Co-wife: 17</td>
<td>Other unrelated person: 18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amount Tshs</td>
<td>Who paid second visit</td>
<td>Household member</td>
<td>Name</td>
</tr>
<tr>
<td>[open ended see paper attached]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount Tshs</th>
<th>Who paid second visit</th>
<th>Household member</th>
<th>Name</th>
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<tbody>
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<tr>
<td>Code</td>
<td>Illness Episode</td>
<td>62</td>
<td>63</td>
</tr>
<tr>
<td>-------</td>
<td>----------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td></td>
<td>If name made a third visit to another health care provider for this illness episode, where did she/he go?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Please provide name of the facility for qn [62]?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Why did you choose that facility? (refer qn 63)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Did [name] have any problem at the time of the visit to the third provider for this illness episode?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public dispensary: 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private dispensary: 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public health centre: 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District hospital: 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private hospital: 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public hospital: 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private dental clinic: 8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional healer: 9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spiritual healer: 10</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Pharmacy: 11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missionary dispensary: 12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missionary health centre: 13</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Missionary hosp: 14</td>
<td></td>
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<tr>
<td>Code illness episode</td>
<td>66</td>
<td>67</td>
<td>68</td>
</tr>
<tr>
<td>----------------------</td>
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</tr>
<tr>
<td>How much in total was paid for her/his visit to the third health care provider for this illness episode – cost including consultation, drugs, laboratory and transport i.e. Including drugs bought elsewhere</td>
<td>Who paid for her/his visit to the third health care provider for this illness episode?</td>
<td>If household member paid the bill ref qn 67] please specify the relationship to the head of the household</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Amount (Tshs)</th>
<th>Who paid third visit</th>
<th>Household member</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<tr>
<td>Code illness episode</td>
<td>69</td>
<td>70</td>
</tr>
<tr>
<td>----------------------</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Please provide name of the household member who paid the bill. (refer qn 68)</td>
<td>Please provide any other details related to question no. 67-69</td>
<td>What is the condition of the patient now?</td>
</tr>
<tr>
<td>[open ended see paper attached]</td>
<td>Recovered: 1</td>
<td>Continuing problem: 2</td>
</tr>
<tr>
<td>Died: 3</td>
<td>I don’t know: 4</td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Outcome of the illness episode</td>
<td></td>
</tr>
</tbody>
</table>
PART 6: DETAILED QUESTIONS

72a. In your visit(s) to the health care facilities have you ever paid money, over and above the normal charges (ref: above named episodes)?
1 = Yes
2 = No

72b. If Yes: Please give details, ________________________________
   (i) Which illness episode(s) ________________________________
   (ii) In which facility? ________________________________
   (iii) What was the reason(s) for paying extra? ________________
   (iv) Whom did you pay the money to and how? ________________
   (v) Please provide any other additional information. ________________

73a. Have you or anyone in your family ever been excluded from treatment because of inability to pay?
1 = Yes
2 = No

73b. If Yes: Please provide a brief explanation (what facility, how did it happen and why?)______________________________

74a. Are you aware of any exemption procedure that you or your household members are entitled in the current public health care system?
1 = Yes
2 = No

74b. If NO: Please explain briefly ________________

74c. If YES: What is the procedure? ________________________________

75a. Have you or anyone in your household ever received free health care treatment or has been allowed to pay less than the standard fee?
1 = Yes
2 = No

75b. If Yes, Please give details and explain the circumstances ________________

75c. If No, Please comment briefly ________________

76a. Have you or any member of your family ever deferred payment in a health care facility?
1 = Yes
2 = No

76b. *If Yes:* Please give details, where, how and why? __________________
76c. *If No:* Please comment briefly ________________________________

77a. Have you or anyone in your household ever paid in kind at the health care facility?
1 = Yes
2 = No

77b. *If Yes,* Please give details and explain the circumstances _____________

78a. Do you usually receive family and/or friends from the rural areas who are coming to Dar es Salaam to seek health care services?
1 = Yes
2 = No

78b. *If Yes,* Please explain the circumstances, how often, cost involved including who is financing their health care needs. __________________________

79a. Did you or any of the household members made a visit to Spiritual or Traditional healer? (Ref above Named Episodes)
1 = Yes
2 = No

79b. *If Yes,* please provide a brief explanation (who and which episode, cost and who paid etc)? ___________________________________________

80a. Have you or any household member been admitted to the health care facility? (Ref: Above named Episodes)
1 = Yes
2 = No

80b. *If Yes,* please explain briefly (How many days, in which facility, cost involved, who paid, who is involved and in which episode(ref above) etc)

**REMARKS**

QUESTION NO. 47

QUESTION NO. 52
<table>
<thead>
<tr>
<th>QUESTION NO. 56</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION NO. 61</td>
</tr>
<tr>
<td>QUESTION NO. 65</td>
</tr>
<tr>
<td>QUESTION NO. 70</td>
</tr>
<tr>
<td>ANY OTHER REMARKS</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Appendix III
Health Care Providers Questionnaire

TITLE: HEALTH CARE FINANCING AND DELIVERY IN TANZANIA: INCLUDING THE URBAN POOR?

The Case of Kawe Ward, Kinondoni Municipal in Dar es Salaam

-------------------------------
PROVIDERS QUESTIONNAIRE
-------------------------------

PHD RESEARCH PROGRAMME, INSTITUTE OF SOCIAL STUDIES (ISS), THE HAGUE, THE NETHERLANDS

Questionnaire Number ____________________________

Date of Interview ________________________________

Name of Interviewer ______________________________

1. HEALTH CARE FACILITY

1.1 Name of health care facility _____________________

1.2 Location of facility
Street _____________________________________________
Ward _____________________________________________
District ___________________________________________

1.3 Type of health care facility
1 = Hospital ( )
2 = Clinic (specialised) ( )
3 = Health Centre ( )
4 = Dispensary ( )

1.4 Sector of facility
1 = Government ( )
2 = Voluntary/religious/non-profit ( )
3 = Private for profit ( )
1.5 Ownership
1 = Government
2 = Religious organisation (specify)
3 = NGO (specify)
4 = Individual doctor
5 = Several doctors
6 = Doctor plus other(s)
7 = Businessman/men
8 = Company

1.6 Year facility began operation

2. INTERVIEWEE

2.1 Name of Interviewee

2.2 Profession of interviewee

2.3 Administrative position of interviewee

3. SERVICES

(Please Check all applicable)

3.1 Categories of care/services provided
1 = Curative only
2 = Curative and preventive
3 = Curative, preventive and promotive
4 = Curative, preventive, promotive and rehabilitative

Please check if the following types of services are available in your facility:
(i) Minor surgery
(ii) Medical in-patients
(iii) Out-patient curative treatment
(iv) Preventative services (specify)
(v) Laboratory services
(vi) Major Surgery
(vii) Paediatric unit
(viii) Maternity Unit
3.3a  Do you provide MCH services?
1 = Yes
2 = No

3.3.b  If Yes: Please give details about its performance and organisation (utilisation, payment structure if any, who uses the services, the level of support received to provide the service)

4. HEALTH FACILITY UTILISATION

4.1 Number of (actual) beds  __________

Where type of utilisation is applicable, please may we have data by financial year for the number of:

(i)  In-patient Admissions  (Including re-admission)  2003/04  2004/5

(ii)  Outpatient Visits:  (Including return visits)  __________  __________

5. STAFFING

How many staff do you currently have? ________________

Please list the number of staff currently in post in the following categories, and please mention their wage or salary level.

1. Director/Chief Administrative Officer
   No of staff  Wage

2. Medical Officer In-charge  __________  __________
### Prescribers:

3. Medical Officer

4. Assistant Medical Officer (AMO)

5. Dental Officer

6. Assistant Dental Officer (ADO)

7. Clinical Officer (medical assistant)

8. Clinical Assistant (was rural medical aide)

Other Staff:

9. Nursing Officer (White dress, grade I, II, III)

10. Nurse-midwife

11. Public Health Nurse (PHN- blue dress)

12. Nursing Assistant (MCH Aide – Blue dress, Nurse Auxiliary – Orange dress)

13. Laboratory technologist

14. Laboratory technician

15. Laboratory assistant

16. Pharmacist

17. Pharmaceutical technician

18. Pharmaceutical assistant

19. Radiographer

20. Radiography assistant

21. Administrators

22. Accountants

23. Clerks

24. Laundry

25. Cooks

26. Watchmen

27. Drivers

28. Other technicians

29. Other (specify)

---

5.3a Do you send your staff for training?
1 = Yes
2 = No

5.3b If Yes, please give details on staff training in the last 2 years. (Please fill in the table below)

<table>
<thead>
<tr>
<th>Position of the staff that went for training</th>
<th>Where were they sent?</th>
<th>Duration of training</th>
<th>Who met the cost?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

5.4(a) Is it easy to get the type of staff cadre you need for the facility?
1 = Yes
2 = No

5.4(b) If No, why (not)? Probe on the following: what staff are hard to hire, is it the training offered and/or payment problem?

3.5 Compared to other facilities around here of the same level, how qualified are your staff?
1 = More Qualified
2 = Equally Qualified
3 = Less Qualified
4 = Don’t Know

5.6(a) Do you have any incentives for your workers?
1 = Yes
2 = No

5.6(b) If Yes, please give details.

5.6(c) If No, why not?
6. PRICES AND CHARGES

What does the facility currently charge for the following services {Note to interviewers: please be very exact about price per dose as specified; the comparability is important}?

6.1a Registration and Consultation
I. Registration fee (if separate from consultation) Tshs______
II. Registration and consultation fees (specialist) Tshs______
III. Registration and consultation fees (non-specialist) Tshs______
IV. Consultation specialist Tshs______________
V. Consultation non-specialist Tshs______________

6.1b Diagnostic Tests:
Blood test:
(I) BS for MPS Tshs______________
(II) Full blood picture Tshs______________
(III) HIV - ELISA Tshs______________
(IV) HIV - Rapid Test Tshs______________
(V) Blood sugar Tshs______________
(VI) HB only Tshs______________

Urine test
(VII) Routine Tshs______________
(VIII) For culture and sensitivity Tshs______________

Stool test
(IX) Routine Tshs______________
(X) For culture and sensitivity Tshs______________
(XI) X-ray chest Tshs______________
(XII) Widal test Tshs______________

6.1c Procedures
(I) Incision and drainage Tshs______________
(II) Circumcision Tshs______________
(III) Caesarean section Tshs______________
(IV) Normal childbirth Tshs______________
(V) Appendectomy Tshs______________
(VI) Evacuation
(Dilatation and Curration) Tshs______________

6.1d Drugs
(Note to interviewer: In addition to the treatment doses specified below, also request treatment protocol as used at the facility for the following diseases and respective charges for treatment of each of them by using their treatment protocol).
Uncomplicated Malaria: Treated with Sulphurdoxin Pyrimethamine- SP
(I) Adult 60 kgs Oral tablets Tshs______________
(II) Child 15 kgs Oral tablets Tshs______________
Dysentery: Treated with Erythromycin
(III) Adult 60 kgs dose - Tablets Tshs______________
(IV) Child 15 kgs - (Syrup) Tshs______________

Uncomplicated Pneumonia: Treated with Amoxycillin
(V) Adult 60 kgs dose - (Tablets) Tshs______________
(VI) Child 15 kgs dose - (Syrup) Tshs______________

Tonsilitis: Treated with Ampicillin Capsules 250 Mgs
(VII) Adult 60 kgs dose - (Tablets) Tshs______________
(VIII) Child 15 kgs dose - (Syrup) Tshs______________

Typhoid fever (Treated with Chloraphenical capsules 250 mg.)
(IX) Adult 60 kgs dose for 10 days Tshs______________

Intestinal worms (Treated with Mebendezol tablets 100mg. For 3 days)
(X) Adult 60 kgs dose Tshs______________

Acute Watery Diarrhoea: Treated with Oral Re-hydration Salt
(XI) Adult 60 kgs dose Tshs______________
(XII) Child 15 kgs dose Tshs______________

What do you know about the prices charged by other facilities in this area? Compared with other facilities of the same level, are your prices and charges lower or higher? Please give examples of comparative charges by facility/test or procedure.

_____________________________________________________

What are the price trends in this area? (Probe for details by: out-patient, in-patient)

_____________________________________________________

6.4a What factors do you take into account in setting prices? (Probe, using the following check list)

(i) Are: costs or expenditure, prices of other facilities, patients’ ability to pay, taken into account?
If so how, and using what information and indicators?
_____________________________________________________

Do you have to charge according to what other providers in this area charge?
_____________________________________________________

6.4b For further clarification on QN 6.4a above, Please give an example of a recent change in prices at this facility, (take me in detail through the process of making the decision; reason for considering a change, who made it, criteria in that case, matters of debate, evidence referred to in deciding)
_____________________________________________________

Apart from the official set charges, are there any workers in this facility or other facilities around here that tend to take extra money from patients?
1 = Yes
2 = No

Do you have to take that into account in setting your own prices?
1 = Yes
2 = No

6.5c Please provide further details on QN 6.5 a and 6.5b above
_____________________________________________________

7. WAIVERS, EXEMPTION AND RESPONSE TO INABILITY TO PAY

7.1a In the past seven days have you had anyone who could not pay what he/she was asked for?
1 = Yes
2 = No

7.1b If Yes, please give details (probe to understand how did they deal with the situation)
_____________________________________________________

7.1c If No probe to know how do they deal with patients who are unable to pay.
_____________________________________________________

7.2a In the past seven days have you reduced fees for any patient(s)?
1 = Yes
2 = No

7.2b If Yes, please give details

7.2c If No probe to know if they have any system in place that allows fees reduction for patients (Who, how and under what conditions)?

7.3a In the last seven days have you allowed anyone to defer payments?
   1 = Yes
   2 = No

7.3b If Yes, please give details (how deferral is requested, agreed and authorised).

7.3c If No probe to know if they have any system in place that allows patients to defer payment

7.4a Do you exempt some people from paying?
   1 = Yes
   2 = No

7.4b If No, why you do not have any exemption system in place?

7.4c If Yes, how does the exemption system work?

How does a patient request exemption?

Who authorises exemption?

What are the criteria for giving exemptions?

How do patients know there is provision for exemptions?
What charges are exempted?
_____________________________________________________

7.4d If yes; Do you think the exemption system is functioning well?
1 = Yes     
2 = No     

7.4e If not (Ref Qn 7.4.c) how does it need to change?
_____________________________________________________

8. FINANCES

8.1 Income

Please could you tell us your income (cash income) for the last two years under the following headings. We would like to know your actual income under each heading; there is a question below on budgeted income {Note: this may need to be compiled from a more detailed breakdown; please attach the details, and treat the table below as a summary}.

<table>
<thead>
<tr>
<th>Source of income:</th>
<th>2003/4</th>
<th>2004/5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central government (moh)</td>
<td>Tshs___</td>
<td>______</td>
</tr>
<tr>
<td>Municipal government (Through Local Government)</td>
<td>Tshs___</td>
<td>______</td>
</tr>
<tr>
<td>Donor funding (please specify source and purpose)</td>
<td>Tshs___</td>
<td>______</td>
</tr>
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<td></td>
<td>Tshs___</td>
<td>______</td>
</tr>
<tr>
<td></td>
<td>Tshs___</td>
<td>______</td>
</tr>
</tbody>
</table>

Religious organisation support (specify)

|                                                       | Tshs___ | ______ |
|                                                       | Tshs___ | ______ |

User fees

| Tshs___ | ______ |

Other fees and charges

| Tshs___ | ______ |
Sale of services: Tshs _____ ________
Loan funding Tshs _____ ________
Other sources Tshs______ ________

(To be asked in public and voluntary sector only) How do you account for your funds from different sources? Please give details for each source, comment on any problems and explain how much flexibility you have in the use of each source of funds.

_____________________________________________________

(To be asked in public sector only) If you tend to under spend on government funds, please indicate why:

_____________________________________________________

(To be asked in public sector only) Is your cash income from government sources less than budgeted? Please give details for the last two years, including problems of delay in arrival of funds.

_____________________________________________________

(Private sector only). What are your formal accounting and reporting requirements?

_____________________________________________________

Do you have any income in kind? Please give details, for two years if possible, with cash value if possible. Please include donations of equipment (e.g. Transport, medical equipment, and supplies). Please include essential drugs kits.

_____________________________________________________

8.7a How would you describe the trend in your facility’s financial situation in the last two years? Please suggest reasons for the trend you described.

_____________________________________________________

8.7b In case you are experiencing financial constraints, how do you cope with the situation?

_____________________________________________________

8.8a Are you involved in the municipal health planning activities?
1 = Yes
2 = No
8.8b If so please give details

9. LINKAGES

9.1 How do you link with other health care facilities from the same or other sectors? Please provide details in the space provided below: (Probe for details; on what services they have linkages on (e.g. Staff, equipment and use of other facilities, how does the arrangement work? Do they pay / get paid? If it’s free why?))

Government sector

Voluntary/religious/non-profit

Private-for profit

9.2a (For health centre/hospital): Do you receive referrals from other providers?
1 = Yes
2 = No

9.2b If yes, REF QN 9.2a: What are the arrangements for referrals? Does the referred patient pay lower charges or get free transport? What types of problems do referred patients face?

9.2c If No, REF QN 9.2a, please provide details, why is that the case?

9.3a Do you make referrals to other providers?
1 = Yes
2 = No

9.3b If Yes: REF QN 9.3a. Please provide further details (Probe for details; where do you refer, what problems are you facing, financial consequences, also find if they have data on the number of patients they have referred in the past 2 years?)

9.3c If No, REF QN 9.3a please provide details, why is that the case?
10. **QUALITY**

10.1(a) Have you received any complaints about your services?
   1 = Yes 
   2 = No

10.1(b) If Yes, REF QN 10.1a, please give details and explain your response. (Probe using the following checklist) complaints to whom, about what, how responded to.

10.2(a) Does this facility keep records of complaints?
   1 = Yes 
   2 = No

10.2(b) If Yes, REF QN 10.2a, please explain how the record keeping process is organised and managed

10.3(a) From what you know about the quality of health care, do you think this facility provides the standard of quality of service you would like to achieve?
   1 = Yes 
   2 = No

10.3(b) If Not, REF QN 10.3 a, please tell us about the problems.

10.3 (c) If yes, REF QN 10.3a, why so successful?

10.4(a) Do you have any way of evaluating the quality of the care you provide?
   1 = Yes 
   2 = No

10.4 (b) If Yes, REF QN 10.4a, please explain. May we have details of any available results of such evaluations?
10.5(a) There are also complaints about unprofessional behaviour that patients may be less aware of such as over-prescribing in order to increase a prescriber’s income. Are such practices common?
1 = Yes  
2 = No

10.5(b) If Yes, REF QN 10.5a, please give examples of such problems you see around you, and say how such problems affect your services or your ability to run your facility well.

What could be done to improve the general quality of services to patients in the health care market?

10.7 Please comment on the formal system of licensing and supervision (inspection) of facilities. How does it affect your decision making and ability to provide services.

10.8(a) Why do you think patients come here? (Probe for the interviewees’ ideas using the following checklist). Are patients mainly attracted because the facility is:
(i). Closer (   )
(ii). Cheaper (   )
(iii). Better quality (ask for definition) (   )
(iv). Better staff attitude (   )
(v). Drugs availability (   )
(vi). Cleaner (   )
(vii). Range of services offered (   )
(viii). Other, specify (   )

10.8(b) Please comment on availability and quality of drugs in your facility? (Do you experience shortages, how often? Are you satisfied with the quality of drugs that you provide, why?)

10.9 What kind of patients do you have? (Probe on the following): do they come from particular areas, particular income groups, other groupings? How has that been changing?)
11: LIST OF THINGS TO OBSERVE

(Please observe the following in each of the health care facilities interviewed)

Does the facility have running water and electricity?
1 = Yes □
2 = No □

Please observe the cleanliness and condition of the laboratory
_____________________________________________________

(a) Does the laboratory have a microscope?
1 = Yes □
2 = No □
11.3(b) Please check if it is working?

(a) Does the facility have a toilet?
1 = Yes □
2 = No □
11.4(b) If Yes: How many and are they clean?
_____________________________________________________

Please observe the condition of wards or the resting room: (check on the following; are bed sheets and mosquito nets available? Are they clean?)
_____________________________________________________

Overall how is the condition of the floor? What type? Is it clean?
_____________________________________________________

Observe their drug storage (If possible ask to have a look at it) Does it have a fridge (or kerosene fridge)? How is the stock of drugs?
_____________________________________________________

If possible try also to observe the attitudes and behaviour of working staff: their attitude and behaviour towards patients and interaction between themselves.
_____________________________________________________
Appendix IV
Exit Survey Questionnaire

TITLE: HEALTH CARE FINANCING AND DELIVERY IN TANZANIA: INCLUDING THE URBAN POOR?

The Case of Kawe Ward, Kinondoni Municipal in Dar es Salaam

EXIT PATIENT QUESTIONNAIRE

PHD RESEARCH PROGRAMME, INSTITUTE OF SOCIAL STUDIES (ISS), THE HAGUE, THE NETHERLANDS

Questionnaire Number ________________________________
Date of Interview ________________________________
Name of Interviewer ________________________________

Location:
(i) Municipal ________________________________
(ii) Ward ________________________________
(iii) Street ________________________________

Health Facility
(iv) Name of the Health Care Facility ________________________________

(v) Type of Health Care Facility
   Hospital [ ]
   Clinic [ ]
   Health Centre [ ]
   Dispensary [ ]

(vi) Ownership of Health Care Facility
    Public [ ]
    Private [ ]
    Voluntary/Religious [ ]
    Other, specify ________________________________
1. BACKGROUND OF THE INTERVIEWEE

Sex
Female ---------1
Male-------------2

Age Years 

Marital Status
Married/monogamous…..1
Married/ polygamous…….2
Partner/co-habiting……3
Divorced……………….4
Separated…………….5
Widow/widower………..6
Never married…………...7

Level of Education
No Formal Education---------------------1
Primary School----------------------------2
Course After Primary School------------3
Secondary Certificate---------------------4
Course After Secondary Education-----5
High School Certificate------------------6
Diploma------------------------------------7
University Degree----------------------8
Adult Education----------------------------9
Other Certificates, specify------------------------10

1.5 Occupation 

1.6 Main Source of Income
Agriculture-------------------------------1
Formal employment – public--------2
Formal employment – private--------3
Self- employment (trading)----------4
Other, specify------------------------5

2. REASONS FOR COMING TO THE FACILITY

2.1 Did you come to this facility because of a health care problem for yourself or someone else?
Someone else----1
Myself---------2

2.2 If someone else (Question 2.1) what is the relationship?
Wife/Husband………………………………….. 1
Son/Daughter …………………………….      2
Step Son/Daughter …………………………….   3
Grandchild …………………………………….……4
<table>
<thead>
<tr>
<th>Relative Type</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>Father/Mother</td>
<td>5</td>
</tr>
<tr>
<td>Sister/Brother</td>
<td>6</td>
</tr>
<tr>
<td>Niece/Nephew</td>
<td>7</td>
</tr>
<tr>
<td>Son/Daughter-In-Law</td>
<td>8</td>
</tr>
<tr>
<td>Brother/Sister-In-Law</td>
<td>9</td>
</tr>
<tr>
<td>Father/Mother-In-Law</td>
<td>10</td>
</tr>
<tr>
<td>Other Relative of Head Or Of His/Her Spouse</td>
<td>11</td>
</tr>
<tr>
<td>Servant/Makubaliano</td>
<td>12</td>
</tr>
<tr>
<td>Servant/Mkataba</td>
<td>13</td>
</tr>
<tr>
<td>Tenant/Boarder</td>
<td>14</td>
</tr>
<tr>
<td>Adopted/Foster/Step Child</td>
<td>15</td>
</tr>
<tr>
<td>Co-Wife</td>
<td>16</td>
</tr>
<tr>
<td>Other Unrelated Person</td>
<td>17</td>
</tr>
</tbody>
</table>

2.3 If someone else (Question 2.1). What is the age of the person who came to seek medical attention?  

2.4 If someone else (Question 2.1). What is the sex of the person who came to seek medical attention?  
- Male  
- Female  

2.5a What are the health problems that brought you here? (Please mention all the problems)  
- Fever/Malaria...
- Diarrhoea...
- Accident...
- Dental...
- Skin Diseases...
- ENT...
- Respiratory...
- HIV/AIDS...
- Hernia...
- Caesarean...
- Cancer...
- Heart Problem...
- MCH Services...
- Diabetes...
- Other Illness, Specify...
- Other Chronic Illness, Specify...  

2.5b Please provide any further details, if necessary  

2.6 Why did you choose to come here for these problems? (Mark all that apply)  
- Short distance...
- Good/better quality of care...
- Adequate quality of care...
280  THE SYSTEMIC INTERACTION OF HEALTH CARE MARKET AND URBAN POVERTY IN TANZANIA

Cost: Cheap/cheaper-------------------------4
Drugs: Available/likely to be available-------5
Health care workers are qualified-------------6
Health care workers are polite/attentive--------7
Knew health care worker/had a relative there---8
Other, specify---------------------------------9
If quality of care (QN 2.6: 2 or 3), please explain what you thought adequate or good about the quality of care here. (Please mark all that apply and write in other points.)
1. Drugs available/ more often available than elsewhere ( )
2. Staff are qualified/ better qualified than elsewhere ( )
3. Facility is clean/ cleaner than elsewhere ( )
4. Tests are usually/more often available ( )
5. Staff are polite/attentive/more attentive ( )
6. Treatment is good (explain)__________________________( )
7. Waiting time is short/shorter ( )
8. There is little/less hassle ( )
9. You do not have to pay bribes ( )
10. People are cured quite often when they attend here ( )
11. Other explain___________________________________( )

How long did it take for you to receive treatment in this facility?
(Please record the total time that has taken the patient to receive treatment, taking into account the difference in approximate time that the patient came in and out of the facility)
_____________________________________________________

Is this the first place to which you have come for any of these problems?
(If YES skip to QN 2.13)
Yes------------------------1
No-------------------------2

If the answer is No in QN 2.9: Where did you go before?
Public Dispensary..............1
Private Dispensary..............2
Private Health Care Centre.....3
Public Health Care Centre.....4
District Hospital.................5
Private Hospital.................6
Muhimbili........................7
Private Dental Clinic...........8
Traditional Healer................9
Spiritual Healer................10
Pharmacy.........................11
Missionary Dispensary........12
Missionary Health Care Centre..13
Missionary Hospital.............14

2.11 Why did you go to the last place or person before this?
1. Distance: previous facility/person is closer to home (     )
2. Quality of care: thought it was better there (     )
3. Thought they would have drugs available (     )
4. Health care workers polite/attentive (     )
5. Knew a health care worker/had a relative there (     )
6. Knew the facility/person better (     )
8. Others(specify)_________________________________________

2.12 Did you undertake self-medication before seeking treatment for this illness episode?  
Yes--------1
No--------2
2.12a (REF QN 2.12) If Yes, Please Explain

2.13 Generally, how do you perceive the services provided by this facility?  
Good--------------1
Bad-------------2
In between-------3
2.13a (REF QN 2.13) In either of the case above, please explain your answer in terms of the aspects of the service that matter most to you.

3. COST

3.1 Who paid/will pay the bill for the services?  
Self-----------------(1)
Third party----------(2)
3.1a If Self (Ref Qn 3.1): How much in total have you paid at this facility? Tshs __________

3.1b (Ref QN 3.1a) Were you able to pay all you were asked to pay?  
Yes--------------1
No--------------2
3.1c (Ref QN 3.1b) If ‘NO’, what happened?  
1. Allowed to defer payment
2. Bought only part of the drugs/ received only part of the treatment prescribed
3. Tests were not done
4. Excluded from treatment
5. Allowed to make a partial payment.
3.1d (Ref QN 3.1b) If ‘NO’, please give details on the decision made (ref 3.1c) who made the decision and how was it made?
3.1e (Ref QN 3.1) If third party: Please indicate who is it? (Mark all applicable)

- Employer ...............................................................1
- Private Health Care Insurance..................................2
- National Health Care Insurance.................................3
- Community Health Care Insurance.............................4
- Immediate Relative within Same Household..................5
- Other Relatives/Friend(s) ...........................................6
- Other Specify..........................................................7

3.1f (REF QN 3.1.e) Please provide details on any of the answer(s) given above

3.2 If self (QN. 3.1), Please say how much you paid for the following:  (Write the figures against all that apply)

(I). Registration alone  Tshs.______________
(II). Consultation alone  Tshs.______________
(III). Consultation plus registration Tshs.______________
(IV). Diagnostic test, specify: Tshs.______________
(V). Drugs Tshs.______________
(VI). Injection Tshs.______________
(VII) Drugs plus injection Tshs.______________
(VIII) Other payments, specify Tshs.______________

3.3 Do you have a prescription?
Yes------------------1
No-------------------2

3.3a Note to Interviewer: Please have a look at the prescription given to the patient

Check how many items has the patient been prescribed-------------------

3.4 Have you bought drugs outside the facility from a prescription issued at the facility?
Yes------------------------------------------------------------------1
No, but I have a prescription to do so--------------------------2
No, and I have no prescription-----------------------------3
No, I have a prescription but I have no money to do so-----4

3.4a If yes (Ref QN 3.4), how much did they cost? Tshs._______

3.4b If yes or no (REF. QN 3.4 part 1/2), where did you/will you purchase the drugs?

3.5 Do you know what drugs you were given?
   Yes ----------------------------1
   No---------------------------2

3.5a  (REF QN 3.5) If yes, please mention them

3.6 If you were given drugs, were you told what the drugs were for and how to take them?
   Yes
   No

3.6a  (REF QN 3.6) What advice were you given?

3.7 Were you told what you were suffering from?
   Yes
   No

3.8 Did you pay anything in kind?
   Yes------------------------1
   No------------------------2

3.8a  (REF QN 3.8) If Yes, please give details (what did you pay, why and to whom did you pay)

3.9 Did you pay any extra money, over and above the normal charges?
   Yes----------1
   No---------2

3.9a  (REF QN 3.9) If yes, how much did you pay? (Please ask if this sum is included in the total given before)

3.9b  (REF QN 3.9a) Please say why you paid this money, for example:
      (mark all that apply, then probe for details and fill in 3.10c)
      You felt you had to pay a bribe to receive proper treatment ---------------1
      You were asked for an extra payment---------------------------------------2
      You paid something to be seen promptly/earlier than would
      Otherwise have been the case---------------------------------------------3
      You paid to get a test done that would otherwise have been unavailable--4
      You paid to have access to drugs that would otherwise have been unavailable----5
      It is usual to leave something for the health care worker(s)--------------6
You wanted to leave something as thanks for good treatment, or to be treated well in future. 

3.9c (REF QN 3.9b) For each case, please give details, and say how much you paid and, if willing who you paid (e.g. Doctor, clerk, technician – not the name)

3.10 Are you aware of other patients who have been asked to pay extra here?
Yes---------1
No----------2

3.10a (REF QN 3.10) If yes, please give details.

3.11 Are you aware of any exemption system available in the current health care system?
Yes------------------1
No-------------------2

3.11a If Yes Ref QN 3.11. Please provide further details (how does it work and who is eligible?) 

3.12 Did you receive an exemption from any part of the fee in this illness episode?
Yes------------------1
No-------------------2

3.12a (REF QN 3.12) If YES, please provide further details on the process of obtaining the exemption (who made the decision and how was it made? Was it on the spot or after formal application?)
Appendices

Appendix V

Total Number of Households in The Selected Ten Cell Units

<table>
<thead>
<tr>
<th>SELECTED TEN CELLS</th>
<th>UKWAMANI</th>
<th>MLALAKUA</th>
<th>MZIMUNI</th>
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<tr>
<td>2</td>
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<td>55</td>
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<tr>
<td>TOTAL</td>
<td>504</td>
<td>365</td>
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Note:
1. Total number of ten-cell units in the selected streets is as follows: Ukwamani 97, Mlalakua 63 and Mzimuni 170.
2. The spatial position of households in Mzimuni numbers 1-10 belongs to the squatter area and numbers 11-20 to the non-squatter area.
References


WHO/GTZ Workshop on Urban Health in Africa, Harare, November-

Atkinson, S., J. Songore and E. Werna (eds) (1996) Urban Health research In De-

Atkinson, S., A. Ngwengwe, M. Macwan’gi, T. Ngulube, T. Harpham and A.
O’Connell (1999) ‘The Referral Process and Urban Health Care in Sub-
Saharan Africa: The Case of Lusaka, Zambia’, Journal of Social Science and

ants of Use of Maternal and Child Health Services in Metro Cebu, the Phil-

rot and Stick: State Mechanisms to Influence Private Provider Behavior’,

Developing Countries’, PHP Departmental Publication No. 4. London
School of Hygiene and Tropical Medicine.

Pro-Poor’, DFID Health Systems Resource Centre (HSRC) <http://www.
eldis.org/cf/search/disp/docdisplay>.


‘District Health Systems: Users’ Preferences for Services in Benin’, Health


Hazards, People’s Vulnerability and Disasters. London: Routledge.

Sector: Meeting Health Needs in Context of Social Change in Low and
Middle-Income Countries’, IDS Working Paper 136. Institute of Develop-
ment Studies, Brighton, Sussex.

Cases. Illinois: Richard D. Irwin Inc.

Health Impacts In Developing Country Cities. Urban Management Program, Urban
Bank.

Press.


References


References


Perry, H., N. Robison, D. Chaves, O. Taja, C. Hilari, D. Shanklin and J. Wyom
of the Census Based, Impact-Oriented (CBIO) Approach to Primary Health
Care Developed in Bolivia, South America’. Social Science and Medicine 48(8):
1053-68.
Working Paper No 110. Cambridge, MA: Massachusetts Institute of Tech-
nology.
Efficient? Some Evidence from Rural India’, in D. Van de Walle and K.
Nead (eds), Public Spending and the Poor: Theory and Evidance. Baltimore and
Ravicz, M., C. Griffin, A. Follmer and T. Fox (eds) (1996) Health Policy in East-
World Bank.
Reinhardt, U. (1989) ‘Economists in Health Care: Saviours, or Elephants in 
REPOA.
Rifkin, S., I. Muller and W. Bichmann (1988) ‘Primary Health Care: On Measur-
Rochais, L. (1989) ‘Information Asymmetry and Search in the Market for Phy-
of Rural Livelihoods in Tanzanian Village’. Phd dissertation. The Institute
Salmen, L. (1995) ‘Participatory Poverty Assessment: Incorporating Poor Peo-
ple’s Perspectives into Poverty Assessment Work’. Environment Department
IDS Working Paper 72, Brighton, Institute of Development Studies, University
of Sussex.
Africa. Centre for Development Research, Copenhagen, in Association with
Mkuki na Nyota, Dar es Salaam; Fountain Publishers, Kampala; Heine- mann, Portsmouth (NH); and James Currey, London.


SDC Consultant and PER Task Team, Ministry of Health, Tanzania.
URT (2002a) ‘Household Budget Survey (HBS 2000/01)’, National Bureau of
Statistics, Dar es Salaam, Tanzania.
Ministry of Health, Tanzania.
PER Task Team, Ministry of Health, Tanzania.
URT (2003b) Population and Housing Census: General Report. Dar es Salaam, Tan-
zania: Government Printer.
Planning, Economy and Empowerment, Tanzania: Mkuki na Nyota Pub-
lishers.
URT-moh (1994) ‘Utaratibu wa Ushirikishaji Wa nanchi Kuchangia
of User Charges’. Two Years Experience, Cost Sharing Implementation
Committee, Ministry of Health, Tanzania.
and Budget Framework for 2001/02 –2003/04, Issued by the Ministry of
Finance, Dar es Salaam Tanzania.
Health, Tanzania.
Health, Tanzania.
URT-moh (2005) ‘Report of the 6th Tanzania Joint Annual Health Sector Re-
view’, Health Sector Reform Secretariat, Ministry of Health, Dar es Salaam,
Tanzania.
Team and Submitted to the Sector Working Group. Ministry of Health,
Tanzania.
URT-moh (1994) ‘Utaratibu wa Ushirikishaji Wananchi Kuchangia Gharama za
Huduma ya Afya Nchini’. Ministry of Health, Tanzania.


References


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Since 1999 Ms Kida has been working at various capacities with Economic and Social Research Foundation (ESRF) based in Dar es Salaam, Tanzania. Within ESRF core programme, she has been involved extensively in conducting research and capacity building activities in the following main areas: Social Service Delivery (Health and Education), Poverty Analysis, HIV/AIDS and Social Protection. Since 2007, she has also been involved in coordination of Tanzania Postgraduate Diploma Programme in Poverty Analysis. A programme supported by United Nations (UN) Joint Programme on Capacity Strengthening for Development Management (JP4) and delivered by ISS, ESRF and REPOA.

Among others, she has also participated in an international collaborative research “Exploring the Influence of Trust over Health Workers Performance”, a research project that was jointly conducted by the Centre for health policy, University of Witwatersrand in South Africa, ESRF, Ifakara Health Institute (Tanzania) and London School of Hygiene and Tropical Medicine. Ms Kida was also part of the team that developed the Tanzanian Rural Policy and Strategy (2000/2001). Furthermore, Ms Kida has also co-authored a chapter (2005) in a book titled “Commercialisation of Health Care: Global and Local Dynamics and Policy Responses” based on research work conducted for United Nations Institute for Social Development (UNRISD). She has also published a paper in the African Journal of Finance and Management (2001) on “the Role of Human Capabilities in Economic Development”. Currently, she is also working on a joint paper for WHO, Geneva on “Unregulated Commercialisation in Health care: Evidence and lessons from Tanzania” and Cost of Inaction Project “Responding to Children Affected
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DECLARATION:
This thesis has not been submitted to any university for a degree or any other award.