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General introduction



GENERAL INTRODUCTION

From the moment of birth, and ideally from the moment of conception, all human beings have the fundamental right to receive the highest level of healthcare. This right is consolidated in the Dutch law and has a strong anchorage with the legislative framework of the international human rights treaties.^{1,2} Since 1980 the issue of ‘health inequalities’ has been on the political agenda in the Netherlands. The agenda setting and national policy was mainly aimed at the behavioral change of Dutch citizens in order to improve individual and general health in able to avoid and decrease health inequalities in Dutch society. These policy programs were mainly focused on targeted so-called high risk groups such as youth, citizens living in deprived areas, and immigrants. Despite these policies health disparities still exist.^{3,4}

Health inequalities are also present in the Dutch antenatal and maternity healthcare setting. There are disparities noticeable in the *provision of care, healthcare utilization* and *healthcare outcomes* in terms of perinatal morbidity and mortality.

Provision of care: inadequate provision of antenatal care may also play a role in these adverse perinatal outcomes. Communication and socio-economic problems, suboptimal health literacy, lack of knowledge about the antenatal and maternity care system, and substantive differences in expectations between care provider and patient about used language (proficiency, use of professional or relative interpreter), cultural competence of the prenatal care provider and the type of care provided can cause insufficient provision of antenatal and maternity care.^{5,6}

Healthcare utilization: especially Dutch women with an non-western immigrant and a low socio-economic status background have to deal with limited access to antenatal and maternity healthcare. The quality of the provided antenatal and maternity care in terms of responsiveness, the way individuals are treated, and the environment in which they are treated during health system interactions, determines access to and utilization of care.⁷ The existing cultural competence of the antenatal and maternity care system can also play a decisive role in the access and quality of care.⁸⁻¹⁰

In the Netherlands, non-western pregnant women make inadequate use of antenatal care (e.g. concerning a delayed first antenatal visit and a lower frequency of antenatal care consultations) twice as often in comparison to pregnant women with a native Dutch background.¹¹⁻¹³ Pregnant women with a low social economic status background experienced the same aforementioned difficulties concerning care utilization.¹⁴⁻¹⁶ The most frequently reported impeding factors for healthcare utilization are insufficient periconceptional and prenatal prevention, lack of knowledge about general hygiene and the healthcare system, and poor language proficiency.^{12,14}

Healthcare outcomes: perinatal mortality was substantially higher in the Netherlands compared to other European countries.^{17,18} Especially nonmedical characteristics of

pregnant women, such as non-western ethnicity and a low Social Economic Status (SES) background, have been negatively associated with perinatal morbidity and mortality.^{18, 19}

What is already known

The practice of antenatal and maternity care and scientific research within a multi-ethnic population has already provided valuable insights so far. A lot is already known about determinants known to be associated with healthcare provision, the effect of health education interventions, healthcare utilization and women's experiences with antenatal and maternity care.

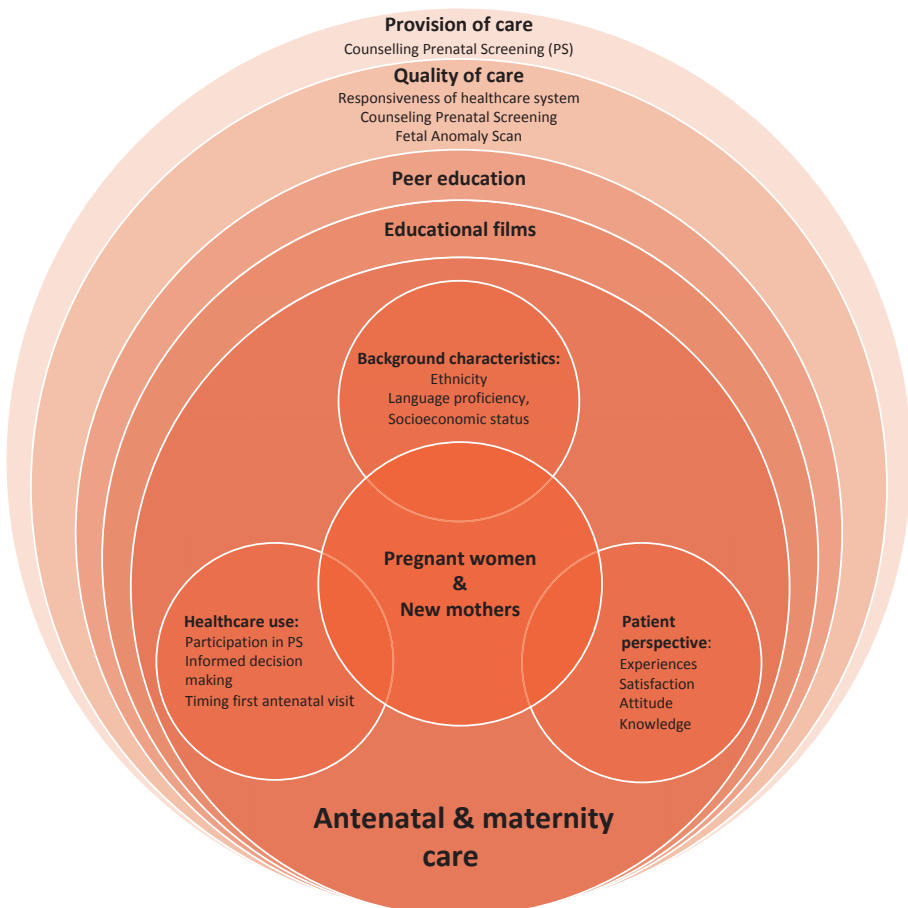


Figure 1.1 Exploring antenatal and maternity care provision and utilization in a multi-ethnic population

Figure 1 shows the research context of this thesis. Its various elements and figure composition were derived from and based on previous findings in this field. A summary of these findings will follow below. In the center of the figure the pregnant woman/new mother is shown surrounded by the characteristic background, use of healthcare and variable opinions that have been researched for this thesis. They are embedded in the measured components of the provision of antenatal and maternity care, such as the quality of care and healthcare interventions.

Provision of antenatal care

Individual characteristics, for example age, gender, educational level, ethnicity, level of knowledge (health literacy), and the attitude towards specific subjects concerning both immigrant women and care providers, influence the provision of antenatal and maternity care.^{6,13,20-23}

The Dutch prenatal screening program consists of *counselling* for screening for Down's, Edwards' and Patau's syndrome, the screening of structural fetal anomalies, and the actual execution of the prenatal screening tests, namely the first trimester combined test, Non Invasive Prenatal Test (NIPT) (since April 2017), and the second trimester fetal anomaly scan. Several studies underline the fact that information provision about prenatal screening, consisting of prenatal counseling and providing leaflets only, is not sufficient for pregnant women with a non-western immigrant and low social economic status background.^{24, 25} These women more frequently make an insufficiently informed decision concerning participation in an antenatal screening.²⁶ Previous research calls for improvements in the information provision procedure of prenatal screening when it comes to used information materials and bridging language proficiency, culture, religious and health illiteracy barriers.^{23,27-29}

A small part of research in this thesis elaborates on the puerperium. Therefore, also information about the provision of maternity care within a multi-ethnic women's population is provided. Sufficient communication, consistent information, continuity of care, trust in the relationship with the new mother and her social network all are important components to increase quality of maternity care for a new mother with an immigrant background.^{8, 21, 30, 31}

Previous research shows that the absence of language proficiency, a low educational level, health illiteracy, differences in expectations and limited trust between pregnant women and the care provider as well as short medical consultations can lead to miscommunications with pregnant women with an immigrant background.^{32, 33} The antenatal care providers experience the use of the professional interpreter as the most successful means to be able to explore the health situation of the pregnant women that have a low language proficiency level and the most effective way to provide adequate

care in terms of objective communication and to create the possibility to discuss sensitive and complex subjects.^{6, 34}

In the maternity care setting the social network of the new mother with an immigration background can play a dominant role in the communication with the patient.⁸ Often, the social network gives well intended and harmless support, advice and information which might partially be based on cultural and religious beliefs, but can sometimes lead to health risks for mother and child.^{6, 8}

Health education interventions

Previous research shows that the level of general knowledge about health, diseases and healthcare is lower in women with an immigrant background in comparison with native women.^{11, 12, 35} There is especially a low level of knowledge concerning the Dutch system of antenatal and maternity care among this segment of the population, which can result in limited access to antenatal and maternity care, as well as utilization problems.⁶ The effectiveness of health education in relation to antenatal and maternity care can be increased when peers are involved and when the content and organizational format is adjusted to the whole obstetric care chain.^{36, 37} The results of a Dutch health educational project for immigrant women shows that these women especially have the need for health education about pregnancy and genetics.³⁷ Adjusting health education to the health literacy level of the participant, verbal and non-verbal communication, and individual culture and religious values of the participant, can contribute to a positive effect of health education for immigrant target groups.³⁸

Healthcare utilization

Pregnant women with a non-western, first generation, immigrant background, are 'too late' (≥ 11 weeks gestational age) for their first antenatal visit, which is three times as often than is the case for native Dutch women, and one and a half times as often as second generation immigrant women.^{11, 39, 40} Non-medical determinants such as a limited or absent Dutch language proficiency level, a first immigrant generation background, a relatively young age, a low educational attainment level, and living in a highly urban area, are factors associated with a late antenatal start.³⁹

For pregnant women with a first generation immigrant background demographic, pregnancy-and socio-economic factors such as having a young age, an unplanned pregnancy, an adverse previous pregnancy outcome, a low socio-economic status, and the absence of a healthcare insurance play a role in the inadequate use of antenatal care.^{11, 41} Responsiveness of healthcare factors that influence the use of antenatal care are the organization of care (location and setting), the role of the various care providers (general practitioners, midwives, gynecologists), how appointments can be made and the means of communication.^{20, 42}

An existing language barrier between the antenatal or maternity care provider and the patient does not automatically lead to healthcare utilization problems.⁴² A possible migration background of pregnant women and new mothers has a more determining effect on the use of antenatal and maternity care than the existing language barriers.^{6, 12} Cultural factors may also influence the use of antenatal and maternity care, such as convictions concerning health and provided healthcare, related rituals and behavior, culturally determined family dynamics, as well as the religious and cultural beliefs of the women and their social network.^{12, 20, 27} More specific, having a non-western immigrant background often is associated with a lower uptake for the combined test when compared to native Dutch pregnant women.^{26, 43, 44} Religious (Islamic / Protestant Christian) pregnant women and women with a low language proficiency level have a lower uptake rate for the Fetal Anomaly Scan.⁴³⁻⁴⁵ Also differences exist in the use of maternity care, comparing new mothers with a non-western immigrant background with western immigrant women and women with a Native Dutch background. Women with a non-western immigrant background and / or a low socio-economic status less frequently make use of maternity care at home and use fewer maternity care hours.^{16, 46, 47}

Experiences with antenatal and maternity care

The analysis concerning responsiveness of the Dutch perinatal care services from the women's perspective shows that 'client orientation' components, for instance *choice and continuity, prompt attention, quality of basic amenities* and *social consideration* need improvements to positively facilitate the provision of antenatal and maternity care.⁴⁸ This discovery shows a similarity with other international research, which can be explained by the difficulty to conduct changes in the organization of care required for 'client orientation' domains.^{49, 50}

AIMS OF THIS THESIS

The aim of this thesis is to increase insight in the existing adjustment of obstetric care with the healthcare utilization needs of the Dutch multi-ethnic reproductive women's population and to propose strategies that can contribute to enhancing the provision and utilization of care within this population. This thesis addresses this aim in three parts:

- Part I *Aim:* to investigate the level of satisfaction concerning obstetric healthcare, inequalities in use and provision of care related to antenatal and maternity healthcare in a multi-ethnic women's population.
- Part II *Aim:* to assess the quality of counseling in relation to prenatal screening and the ultrasound fetal anomaly scan which is made in the second trimester.

Part III *Aim*: to evaluate interventions that have the goal to improve informed decision making, healthcare knowledge, and healthy behavior.

These aims have been translated into the following research questions:

1. What is the level of satisfaction with antenatal, birthing and maternity care of multi-ethnic and overall low social-economic status urban women in Rotterdam?(Part I, chapter2)
2. What inequalities exist in the information provision procedure of prenatal screening, uptake of prenatal screening according to ethnicity, language proficiency and socio-economic status in the urban areas of the Netherlands? (Part I, chapter 3 and 4)
3. Which maternal determinants and self-reported reasons are associated with delay in timing of the first antenatal visit of pregnant women that receive an information offer about prenatal screening? (Part I, chapter 5)
4. Which quality assessment methods can contribute to a standardized, easy to reproduce and reliable quality assessment of counseling concerning prenatal screening and the second-trimester ultrasound fetal anomaly scan? (Part II, chapter 6 and 7)
5. Which interventions can contribute to improvement of knowledge about antenatal and maternity care, healthy behavior and informed decision making about participation in prenatal screening? (Part III, chapter 8 en 9)

OUTLINE OF THIS THESIS

This thesis is structured by the three before mentioned aims.

Part I addresses the investigation of satisfaction and inequalities of use and provision of care related to antenatal and maternity healthcare in a multi-ethnic women's population. **Chapter 2** describes the satisfaction with antenatal, birthing and maternity care of low-educated native Dutch and non-western minority urban women. **Chapter 3** gives an overview of the existing associations between the information provision procedure of prenatal screening for Down's syndrome and congenital anomalies in the Netherlands and the intention to participate in prenatal screening of ethnic groups and Dutch language proficiency groups. **Chapter 4** presents the existing inequalities in uptake of prenatal screening according to ethnicity and socio-economic status in the urban areas of the Netherlands. The first part of this thesis is completed by **Chapter 5** which describes the association between maternal determinants and self-reported reasons for delay in timing of the first antenatal visit of pregnant women that get an information offer about prenatal screening.

Part II focusses on the assessment of the quality of antenatal care performances of counseling about prenatal screening and the second-trimester ultrasound fetal anomaly scan. **Chapter 6** presents a reproducible and reliable study of a new developed assessment method counselling for prenatal screening for the assessment of the health educational part of a counselling session. The following **Chapter 7** shows the scanning performance of all sonographers in the southwestern region of the Netherlands using a standardized image-scoring method.

The final **part III** of the thesis consists of an evaluation of interventions improving informed decision making, healthcare knowledge and healthy behavior. **Chapter 8** describes which recruitment method is the most successful to reach specific disadvantaged target groups for Reproductive Health Peer Education. It also shows the effect of Reproductive Health Peer Education on knowledge about perinatal health within a multi-ethnic participant population. The final chapter of part III, **Chapter 9** presents a study which aims to evaluate the effect of a culturally competent educational film on informed decision making regarding prenatal screening in a multi-ethnic pregnant women's population.

To complete this thesis, **Chapter 10** provides a summary of the main findings, methodological considerations and implications for the provision of antenatal and maternity care and policy making in this field.

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