Elderly Community Resident's Preferences for Care

A Study of Choices and Determinants
in Hypothetical Care-Need Situations

Gina Wielink

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Voorkeuren van zelfstandig wonende ouderen voor hulp

Een studie naar keuzes en determinanten
in hypothetische hulpbehoefte situaties

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General introduction

1.1 The Elderly's Preferences for Care in Perspective

In most Western societies, the number of elderly people is increasing, both in absolute terms and when expressed as a percentage of the total number of inhabitants. This 'greying' process will continue in the near future; in 1980, 11.5% of the residents in the Netherlands was aged 65 years or older; in 1993 this number had increased to 13.0%; in 2035 it is expected to rise to about 25% (CBS, 1994). Within this population the number of persons aged 85 and above will particularly increase, a phenomenon known as 'double-greying'. Both the growing number of older adults, and improvements in health care which have reduced early death, have caused the number of elderly people with chronic disease and disability to steadily grow. Providing services for disabled elderly people has therefore been a major challenge for health care professionals over the last few decades. The elderly are disproportionate users of the health care system: they consume approximately 30% of the total expenditures on health care in the Netherlands (Groenenboom and Huijsman, 1995).

In order to be able to maintain the provision of adequate services of a high quality, the Dutch authorities commenced cost cutting programmes as well as improving the efficiency of the care for the elderly (Gerritsen, 1993). Since the early seventies the government has been stimulating de-institutionalization, substitution from intramural to extramural care, the 'renewal' of the care for the elderly, and more (Nota bejaardenbeleid, 1970-1971, 1974-1975; Nota flankerend bejaardenbeleid, 1983; Nota zorg voor ouderen, 1986). However, how to cater to the wishes of the elderly into future health care planning has remained an unresolved issue (Steverink, 1996). Despite the view that older adults should have more input in formulating service packages, little research has been done to examine community resident's preferences for support (Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986; Soldo, Wolf and Agree, 1990). The objective of the studies described in this thesis is to assess the care preferences of elderly community residents and to determine which factors affect these choices.

That almost every older adult will experience difficulties in performing daily activities due to infirmities attendant with old age explains, in part, the importance of control by the elderly themselves over care delivery. However, care preferences need to be understood not only from the perspective of the presence of illness, but also for the purpose of gaining insight into those circumstances which contribute to better levels of functioning or activity, for example independence, self-respect and authority (Rubinstein, Kilbride and Nagy, 1992).

The expanding numbers of the elderly have spurred the government to increasingly examine their position in modern society. The pursuit of equivalence between the elderly and the rest of the population has lead to the stimulation of the former's integration and participation in social activities; the independence of older people should be improved (Gerritsen, 1993). These emancipatory developments have improved both the maturity and self-respect of older people; they have become more and more involved in social and political affairs. Having control over one's own affairs conforms to the contemporary norm and contributes towards leading a fulfilling existence. An increasing number of studies have demonstrated the importance of control by the elderly over their own well-being, that is, the extent to which they are able to make decisions on their choice of activity, the method and manner of engagement, its timing, pace, and the like (Rowe and Kahn, 1987). The idea of independence is embodied in the person's ability to control the domain of personal affairs and choices. It is for this reason that being attendant to the care preferences of elderly community residents conforms very well with the government's endeavour to emphasise the position of elderly people in our society.

Along with the changes in the care for the elderly, a trend towards a competitive health care market has also emerged. Competition is put forward as a means of reducing costs, increasing both flexibility and efficiency, and enhancing consumer choice (Schut, 1995). Providers of health care services should fight for the favour of the clients, and the users of health care services are supposed to act like well-informed consumers. Knowledge of the care preferences of consumers therefore seems indispensable in providing care that is 'made-to-measure'. Attention to the choices of the elderly could stimulate them to operate as 'active' consumers that participate fully in decisions about their care (Allen, Hogg and Peace, 1992).

Information on the elderly's preferences for care will be useful in three phases of health care planning. First, in determining an individual service package that is 'made-to-measure'. The preferences of impaired older people are the input in the search for optimal care delivery. Second, in the planning of health care services in the medium range based on expected shortcomings. The recent increase in the preference for private services (see chapter 7) might trigger the government to start stimulating this kind of support, for example. Finally, in steering the future preferences of elderly residents in case that should be necessary. When the choices of older people do not correspond with the future course as it has been plotted, the authorities might want to start mass campaigns to alter the demand for health care in the long-term. The last two aspects also require the analyses of important determinants of the care preferences among the elderly.

To be able to use information on the care preferences of the elderly, accurate, detailed and up-to-date data on the desired choices is required. Two different procedures are available to acquire such information; the principle of revealed preferences and the assessment of preferences of potential users of services on the basis of hypothetical care-need situations. Until now, the principle of revealed preferences has been used quite often to predict future preferences. Revealed preferences are based on the extrapolation of the present use of services, the instrument only accounts for future demographic developments. The technique is easily applicable when accurate current use figures are available, and is based on the service use of impaired older people who actually needed support. Whether the use of services represents the actual preferences of the elderly is uncertain, however. An option that was highly desired may just not be available or accessible. Other disadvantages relate to the fact that this instrument is not workable on an individual basis, and does not allow for changing opinions of the elderly over time.

Another approach is to determine the preferences of potential users of services by asking them to state their preferred option in various care-need situations. This technique provides information on the actual preferences of older adults, especially when respondents are asked to ignore practical barriers to their choice. Data become available that can even be used on an individual basis. Particularly where the time interval between the assessment of the preferences and the actual use of services is reduced to a minimum, the required information represents the most up-to-date choices of the impaired elderly. This particular instrument can thus generate a quicker response to changes to the preferred options of the elderly. Potential users of services, those who are moderately disabled but do not receive much support, might have some problems imagining themselves in need of intensive support. Yet, they seem to be the most appropriate persons to determine preferences for care.

Because of the continuing developments in the care for the elderly, an instrument that quickly detects possible changes in the care preferences of elderly residents is required; it is highly conceivable that future users of services will show preferences which deviate from the current ones. Besides, using preference data in order to adapt policy requires knowledge of the actual preferences of the elderly. Just for these reasons, the extrapolation of revealed preferences does not meet the required standard of assessment. Finally, the instrument of measuring actual preferences, could, if so desired, supply information on an individual basis. Thus, in the studies reported in this thesis, four hypothetical care-need situations are used to assess the care-preferences of elderly community residents. The rationale behind selecting four different situations was that research had indicated that the preference for support depends among others on the type of care required (for example housekeeping or personal care) and the expected duration of that care (Daatland, 1990; McAuley and Blieszner, 1985). Moreover, the use of these four, well-described situations also enabled us to put both standardised and varying situations to each respondent, which considerably improves the comparability and the validity of the findings.

1.2 Availability, Accessibility and Use of Services in the Netherlands

Important aspects in the care decision-making process are the availability and the accessibility of the care services (Johansson and Thorslund, 1992; Logan and Spitze, 1994; Nies, 1992). The availability of a service is the extent to which it is offered, while accessibility is the ability, physical or financial for example, of older persons to make use of a service. Since this report presents the selection of care arrangements of the elderly in the Netherlands, we will begin by briefly outlining the availability, accessibility and use of care services of the elderly in this country.

As in most other countries, the care for the elderly in the Netherlands is largely informal and is provided by children, other relatives, friends and others. Forty-four percents of those aged 75 and over having a moderate degree of disability receive only informal care, and another 26% receives informal care in combination with professional care (Timmermans, 1993). The informal care is mainly provided in the home; in some (exceptional) cases the elderly move in with their relatives. The largest contribution on this type of support is made by spouses and daughters (in law) (Huijsman and De Klerk, 1993).

In the case of a certain level of disability, which is assessed by an independent committee, elderly people may opt for the home care of public service providers. These organisations deliver assistance in housekeeping and personal care in the homes of a growing number of the elderly. At the present time, 30% of the moderately disabled elderly aged 75 years and over receive home help and/or home care, often in combination with informal care (Timmermans, 1993). Although home care organisations have waiting lists because of shortage of funding, these services are readily available for all elderly citizens. These public services are almost without exception run by private non-profit organisations. They depend on government measures for almost all funding. The recipient has to pay a co-payment according to income but the client's contributions are less then 10% of the entire budget (De Klerk, Huijsman and Rutten, 1995).

A third, and expanding type of home care is that offered by the private services. These services, for which the recipient must pay the full cost, generally comprise of only housekeeping assistance. In research among moderately disabled elderly people it was found that 20% received assistance from private services (Wielink and Huijsman, submitted[c]). Until now private services have not been well organised, leaving older persons or network members having to arrange these services themselves. Private organisations have recently begun providing private services for both housekeeping assistance and personal care.

In addition to general hospitals, residential care and nursing home care are the three institutionalised types of care available to the elderly in the Netherlands (STG, 1992). During the last few decades, residential care has evolved from housing for elderly people of all kinds (both moderately and severely disabled) to a home for the elderly in need of intensive care. The differences between residential care and nursing homes have thus become blurred (De Klerk, Huijsman and Rutten, 1995). In nursing homes, constant,

systematic and often lengthy nursing and (para)medical care is provided to somatic or psychogeriatric patients. The accessibility of residential care and nursing homes depends on the level of disability and is assessed by an independent committee on the basis of stringent need-test. While both types of care are publicly financed, in each a different system of cost-sharing is employed.

1.3 Theoretical Choice Behaviour Models

The purpose of this thesis is to elaborate on the preferences of elderly community residents for care in various hypothetical care-need situations. In theorizing this concept we search for affiliation with current developments in the field of the care for the elderly. Recent policy statements from the government encourage the elderly to operate as 'active' consumers and participate fully in decisions made about their care. This development is supported by the recent introduction of the personal attendance allowance which entitles indigent persons to spend an individually assigned amount of money to the expenditures resulting from the need for care to their own judgement (Wielink and Huijsman, 1995). However, until now there has been little discussion of the issues surrounding choice as it applies to consumers of care services as opposed to consumers of goods (Allen, Hogg and Peace, 1992). Furthermore, since the 1980s health care reforms have been proposed and instigated which were directed towards strengthening the role of market forces in resource allocation. Competition in health care is put forward as a means of reducing costs, increasing both flexibility and efficiency, and enhancing consumer choice. Before proceeding with the theoretical concept this research was build upon we will shortly introduce a few theoretical choice behaviour models.

Human choice behaviour is a complicated process which is approached differently by the various scientific disciplines. The standard economic model of rational choice assumes that consumers maximise well-defined utility functions (Frank, 1991). Individuals are evaluating actors who compare advantages and disadvantages of various alternatives in trying to achieve an optimal benefit. According to this theory choice behaviour is determined by two aspects, preferences and constraints. However, economists study constraints and take preferences as given. When questions arise about people's preferences, most economist quickly defer to psychologists, sociologists and philosophers (Frank, 1991).
In sociology preferences are not approached from the standpoint of choice under constraints but from the standpoint of social control. The theory of instrumental preferences is characterised by a shift in emphasis from man as a consumer to man as a producer of one's own social well-being. Individual preferences, therefore, do not result from given 'tastes', but are determined by the social structure (Lindenberg, 1992). The theory rests on the assumption of two kinds of preferences: universal preferences that are identical to all human beings and instrumental preferences which are in fact aids to achieve universal

preferences. The two general goals are physical well-being and social approval, examples of instrumental preferences are comfort and affection (Lindenberg, 1992; Steverink, 1996). There is only one utility function (identical for every human being) and many different sets of production functions, each of which specifies the instrumental relationship between lower order and higher order goals for a particular category of people.
Psychological theories can roughly be distinguished in theories in which behaviour is mainly a result of personal factors, theories that consider behaviour as resulting from situational or environmental influences and theories that consider behaviour as resulting from an interaction between the individual and the environment (Halfens, 1985). Both Rotter's social learning theory and Ajzens and Fishbein's theory of reasoned action are examples of the last mentioned theories (Ajzen and Fishbein, 1980; Rotter, 1975).
Rotter's social learning theory starts from the notion that an individual has various behaviourial possibilities in each situation. On the basis of priorities a choice between the behaviourial possibilities is made. These priorities are determined by two factors. First, the expectation of the individual of the results of a particular choice, and second, the value of the results for the individual. Thus, in a particular situation the individual will behave in agreement with the behaviour that leads to the desired results.
Ajzen and Fishbein's theory of reasoned action is actually a refined version of Rotter's theory. Generally speaking, this theory is based on the assumption that human beings are usually quite rational and make use of the information available to them. People consider the implications of their actions before they decide to engage or not engage in a given behaviour. According to the theory, a person's intention to behaviour is a function of two basic determinants, one personal in nature and the other reflecting social influence. The personal factor is the individual's positive or negative evaluation of performing the behaviour; the attitude toward a behaviour. The second determinant of intention is the person's perception of the social pressure put on him/her to perform the behaviour in question: the subjective norm. Both the attitude and the subjective norm are a function of beliefs, behaviourial and normative beliefs. The relative importance of the attitude and the subjective norm depend on the behaviour under investigation. Frequently, both factors are important determinants of the intention. In addition, the relative weight of the attitudinal and normative factors may vary from one person to another.

Lately, stimulation of the role of elderly people as consumers of care services and the introduction of competition in health care seem the most remarkable developments in the care for the elderly. Therefore, we based our conceptual model describing the choice behaviour of elderly community residents on the economic rational choice theory which emphasises the consumer role and is particularly applicable in a competitive market (Lindenberg, 1992). However, since we were also interested in understanding and predicting preferences, the development of the choice process and the examination of important determinants should be part of the theoretical concept as well. The Consumer Behaviour Model of Engel, Blackwell and Miniard (1986) contains these elements. This model starts from the development of choice under constraints and assumes the building

of choices to be based on a behaviourial intention model (compare Ajzen and Fishbein's model). Furthermore, the decision process in this model is influenced by individual, social and situational factors. This paragraph will continue with a short presentation of this Consumer Behaviour Model.

Consumer Behaviour Model (CBM)

Any type of decision process begins with problem recognition (Figure 1.1.). This occurs when an individual senses a difference between what he or she perceives to be the ideal state of affairs as compared with the actual state of affairs at any point in time. Once a problem is recognised, the individual then must decide what to do. The initial step is an internal search into memory to determine whether enough is known about alternatives to make a choice without further effort. In case insufficient information is available an external search, use is made of a variety of outside information sources. Once the search has proceeded to the point that something is known about alternatives, there must be an evaluation of the major contenders. In reality, search and alternative evaluation take place more or less simultaneously.

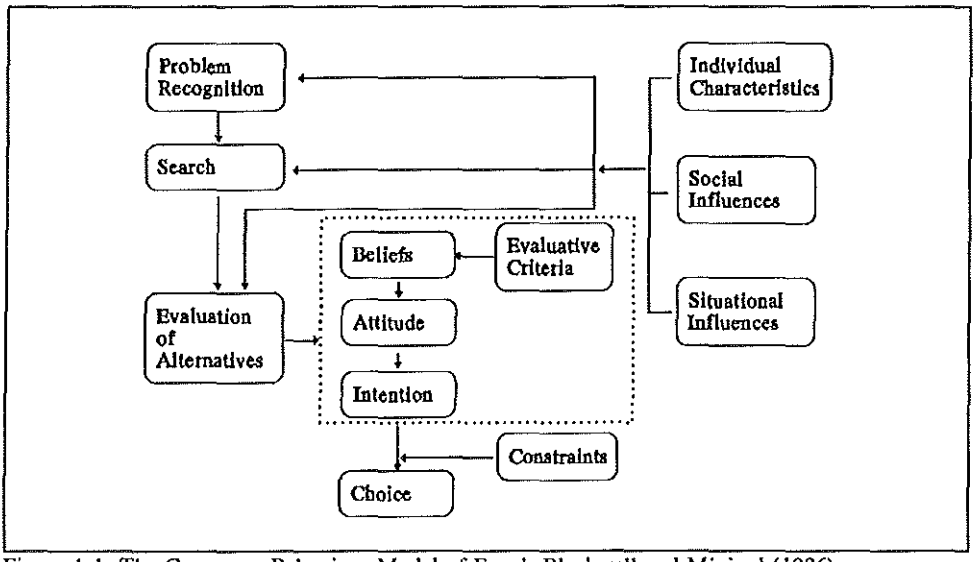

Figure 1.1. The Consumer Behaviour Model of Engel, Blackwell and Miniard (1986).

The foundation of the evaluation of alternatives are evaluative criteria: the standards and specifications used by consumers to compare and evaluate different products. The information gathered through the search process is then compared against important evaluative criteria, and the outcome is the formation of or change in beliefs on certain alternatives. Beliefs are perceptions of an alternative's performance on important evaluative criteria.

Once beliefs have been formulated, attitudes towards a particular choice will also be developed. Attitudes are the evaluation of an alternative as 'acceptable', 'unacceptable', 'the best', or 'the worst'. Within the context of the model, attitude is narrowly defined as the evaluation of the alternatives. The intention refers to the person's action of behaviour tendencies toward the attitude object. If one of the alternatives under consideration emerges as the 'winner', the consumer will form an intention to choose this alternative. Intention, the final component in the alternative evaluation, is the immediate determinant of a particular decision to be made by the person. In general, this intention will culminate in an actual choice, although there are factors, constraints, that may disrupt this flow. All the consecutive steps of the decision process are influenced by individual characteristics such as life-style and personality, by social influences such as culture, family and reference group, and by situational influences.

1.4 A Conceptual Framework for the Development of Preferences

A few adjustments of the CBM will offer a useful framework for studying the development of preferences for care. One adjustment concerns the use of the model to describe the development of preferences: the difference which exists between the actual choice of care as reflected in the ultimate use of services, and a stated preference for a particular service as represented by the most preferred option at a certain moment in time preceding the actual decision. The time interval between these two occasions should be kept in mind. In our research we assess the preferences of elderly community residents at a particular moment in time. Since the duration of the process after the problem has been recognised is highly dependent upon the individual concerned, each moment then represents a variable moment along a continuum starting from the recognition of the need for care and ending with the actual decision on a particular care arrangement being taken. Although we selected moderately disabled elderly people in the last chapters of this thesis, the time interval between the two events - the preference statement and the actual decision on care - remains unknown. As the process of preference development is the focus of this thesis, the actual choice of a particular care arrangement remains beyond the scope of our research. In the continuation of the text the use of terms like decision-making and the selection of services refers to the making of the most preferred choice: the preference at the moment of the interview.
Using the Consumer Behaviour Model we have designed a conceptual framework for the development of preferences for care arrangements. The consecutive parts of the framework will be outlined in this section. In the following section this theoretical framework will be further developed into a model with practical applications, and the operationalisation of this model in our research will be elucidated.

Need for Care

When people age they sooner or later start to consider the possibility of their needing care. The elderly's recognition of this possible need for care triggers the development of care preferences. Variant needs might account for differences in preferred solutions. For example, the need for short-term housekeeping assistance may generate different preferences than those associated with the need for long-term personal care (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990; McAuley and Blieszner, 1985). The perception of the need for care, whether a problem is recognised or not, is related to the person's (in)ability to perform certain key tasks of everyday life. However, the individual interpretation and evaluation of the health condition has great impact on the recognition of the need for care as well (Rubinstein, Kilbride and Nagy, 1992). This last process is an important part of the meaning of illness to each older person. Therefore, the problem recognition of infirm older adults depends on objective disabilities and the individual perception.

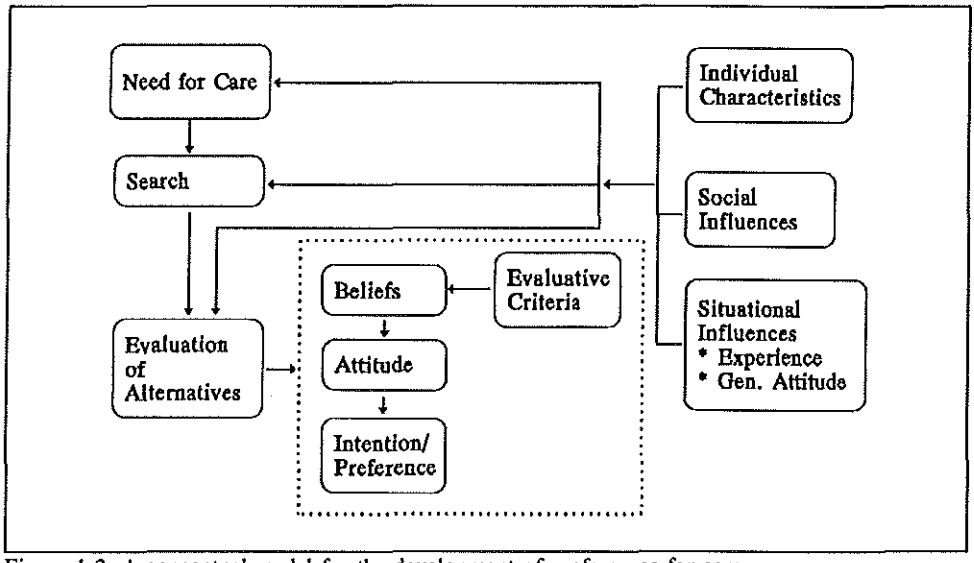

Figure 1.2. A conceptual model for the development of preferences for care

Searching for Alternatives

When the elderly person starts to consider a possible need for care, he or she begins to seek a solution for the problem (Figure 1.2.). Different types of 'searching' are distinguished. The 'internal search' is based on the ready knowledge of the elderly. Others may perform an 'external search' which consists of gathering information from external sources, such as information from other persons or organisations. Significant others (i.e. network members) often stimulate the elderly to orientate towards, for example, institutional care (Allen, Hogg and Peace, 1992; Pratt et al., 1989).

Recognizing that information is a principal antecedent factor affecting the use of services, researchers studied service awareness (Allen, Hogg and Peace, 1992; Krout, 1983; Krout, 1988; Wister, 1992). Not surprisingly, research findings on the degree of knowledge of services vary considerably from study to study and from service to service (Krout, 1983). Research among Dutch elderly people living independently showed that most are familiar with the regular types of care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991), whereas a very small group would like (extra) information on specific services. The result of the search for alternatives is a set of possible care services which the elderly may consider as a potential solution to their problem. The composition of this set is individually determined and is directly related to the need for care.

Evaluation of Alternatives - Evaluative Criteria

After a set of possibilities is composed, the elderly evaluate the different alternatives; the advantages and disadvantages will be compared. Alternative evaluation is based on evaluative criteria, the standards and specifications used by the elderly to compare various types of services. In other words, these reflect the desired aspects that accompany a certain choice, or the undesired aspects of a rejected alternative. For example, such motives as a wish to remain independent could lead to a premium being placed on such aspects as care at home, e.g. a (self-paid) private helper, instead of institutionalization. The evaluative criteria are underlying the motives that the elderly themselves state to be the most important in determining their preferred option. Regarding evaluative criteria two important factors can be distinguished, the number used in reaching a decision and the relative importance of each criterium.

The most important criteria that were stated by older American adults for the process of long-term care decision-making were the wish to live in a pleasant environment and to preserve self-identity (McCullough et al. 1993). In a study on environmental adaptation by elderly people, Wister (1989) discussed the following criteria that older adults use to evaluate their living circumstances: living independently, privacy, social expectations and the perception of futurity. In a few studies the reasons for entering or applying to enter an institution were considered (Cohen et al. 1988; Kraus et al., 1976), and others examined the perception of older persons of various aspects of long-term care services, for example the costs and quality of care (Biedenharn and Bastlin Normoyle, 1991; Brennan, Moos and Lemke, 1989). Although these studies give some clues on important evaluative criteria for care decision-making, the circumstances appeared to be less applicable to elderly community resident's choices for care.

Evaluation of Alternatives - Beliefs, Attitudes and Intention

The evaluation of the alternatives continues with the formulation of beliefs, the consumer's subjective perception's of how an alternative performs on important evaluative criteria. Information stored in long-term memory or direct experience are the sources of beliefs. Beliefs may also be formed as a result of information acquired during external search (Engel, Blackwell and Miniard, 1986).

Once beliefs have been formulated, attitudes towards a particular choice will also be taken. Within the context of the model, attitude is narrowly defined as the evaluation of the alternatives. A person who believes that performing a given behaviour (making a particular choice) will lead to generally positive outcomes will hold a favourite attitude towards performing the behaviour, and vice-versa. A common procedure of the attitude formation is to process information about one alternative at a time, weighing each against the most important criteria. This is done following a compensatory strategy in which perceived weakness on one criteria can be compensated for or offset by the strength of others (Engel, Blackwell and Miniard, 1986).
The intention refers to the person's behaviour tendencies towards the choice issues. The intention, the final component in the alternative evaluation, is immediately preceding a particular decision made by the person. With respect to the development of care preferences of older people the intention equals the preference for a particular care service in a well defined care-need situation. Specific information on the various stages of alternative evaluation by elderly residents regarding care options is not available in the literature.

Influence of Individual Characteristics and Social and Situational Influences
All three types of influencing factors - the individual characteristics and the social and situational influences - affect the consecutive steps of the development of a preferred care service. In this thesis our interest is primarily with the influencing of the evaluation of the alternatives and the outcome of this process. Therefore, the effect of the individual characteristics and social and situational influences on this part of the model is worked out particularly. The literature search for influencing factors of the evaluation process of alternative care services by older people only provided information on factors affecting the outcome of the process, the preferences for a particular kind of service.

Individual Characteristics
The basic demographic characteristics age, gender and marital status were found significant predictors of the preferences of elderly people for care (McAuley and Blieszner, 1985; Wister, 1985; Wister, 1989). Younger and married persons were more likely to express a preference for professional home care or residential care, whereas male preferred care from relatives (McAuley and Blieszner, 1985). The unmarried do not have the advantage of spousal support (Wister, 1989).
The status of one's home might be a limit of choice for various reasons (Rubinstein, Kilbride, Nagy, 1992). The presence of stairs, doorways too narrow for a wheelchair, or the absence of maintenance services can restrict the options.
Income and other socio-economic characteristics strongly influence care decision-making (Rubinstein, Kilbride and Nagy, 1992; Wister, 1985). Michael, Fuchs and Scott (1980) argue that income level is the major determinant of the propensity to live independently, which they view as 'a reflection of an economic demand for privacy'. However, McAuley and Blieszner (1985) found that persons with a high socio-economic status consider professional home care and residential care the most appropriate care arrangements.

From studies explaining the elderly's use of services it is known that next to physical disabilities, psychiatric problems can also play an important role in care decision-making (Bisscheroux and Frederiks, 1986). Various operationalisations of mental/emotional disabilities have been used in research on care use: loneliness, inability to make decisions, the satisfaction with certain aspects of life, depressive complaints, and mental status. However, until now it has not been determined which of these factors is the most influential (Bisscheroux and Frederiks, 1986; Branch and Jette, 1982). From a qualitative research among elderly Americans, Rubinstein, Kilbride and Nagy (1992) stated that anxiety and loneliness influence the elderly's care preferences. McAuley and Blieszner (1985) reported a positive relationship between emotional problems and the choice for paid in-home care. A final psychiatric factor that needs attention is the personality of the elderly. Although hardly ever mentioned in research, Wister (1992) assessed the influence of such factors on the future use of services and concluded that personality factors such as assertiveness or self-confidence might have a major influence on preference development.

Social Influences

There has been considerable research in the gerontological literature about the role of physicians and family in decisions concerning various aspects of the care of the elderly (Deimling, Smerglia and Barresi, 1990; Kapp, 1991). Social influences on care decision-making concern the involvement of family, friends, health care professionals and other network members in various ways. Pratt et al. (1989) found that elderly people receive significant amounts of advice form their adult children. The absence or presence of an (extensive) network surrounding elders will be an important influencing factor in care decision-making. The interaction with the social environment is another factor that was found to influence the choice process of elderly. Receiving help with household activities or personal care from relatives was more likely to be selected by those persons who received a more extensive social support (McAuley and Blieszner, 1985.)

Situational Influences

Based on both a literature search and expert opinion, important situational determinants of the evaluation process of developing care preferences have been framed. This exercise revealed two important factors. First, the previous experience older people had with various kinds of services may be influential on the development of preferences for care arrangements. The generalised attitudes towards receiving support are the second source of effect on the evaluation of alternatives.

Previous Experience with Receiving Care

Experience older people previously gained through receiving informal support or public or private services is expected to influence the development of preferences. Beliefs will be coloured by either positive or negative memories of a caregiver. These past experiences frame problems and affect decision-making in a highly individual way (Sims, Boland and O'Neill, 1992).

Dutch studies showed a relationship between receiving professional home care and an increased preference for professional home care (Boom and Suurmeijer, 1989; Kempen and Suurmeijer, 1989). Previous experience with informal care was found to be associated with an increased preference for this same type of support (Brody, Johnsen and Fulcomer, 1984).

Generalised Attitude towards Receiving Support
The effect of individual values and attitudes to care decision-making has been emphasised by several authors (Kane and Kane, 1982; McAuley and Blieszner, 1985; McCullough et al., 1993). Attitudes influence decision-making by controlling the information allowed for deliberation (Sims, Boland and O'Neill, 1992). In contrast with the attitude towards a specific option that was presented earlier as part of the evaluation of alternatives, the generalised attitude represents the attitude towards receiving support that does not hold only for a specific care arrangement but for receiving support in general and is not part of the evaluation of alternatives but influences this process. This attitude generalises during time from one particular situation and provider of services to a series of situations and providers which the individual experiences as similar situations. The generalised attitude affects the evaluation process by influencing the determination of evaluation criteria and affecting the formation of beliefs.
Research indicates that the elderly's generalised attitude towards receiving care is far from uniform. It would appear that many do not hold a positive picture of the services available to them (Krout, 1983). The influence of attitudes on the use of services was demonstrated in a few studies (Deimling and Poulshock, 1985; Wister, 1992). Assessment of the relationship between generalised attitudes towards and preferences for care has not been reported until now.

1.5 Modification of the Conceptual Framework - Preference Development Model

In the studies described in this thesis, a modified version of the earlier presented conceptual framework was used, which will be referred to as the Preference Development Model (Figure 1.3.). In this section this model and how it is operationalised will be illuminated. First, the differences between the original conceptual framework and the Preference Development Model will be clarified. Next, the global operationalisation of the consecutive parts of the model will be described.

Deduction of the Preference Development Model
Like the original conceptual framework, the Preference Development Model (PDM) starts with the consideration of a possible need for care. The recognition of a possible need for care can be defined as the trigger to start searching for a supplier of help. The process continues with the search for alternative care arrangements and the evaluation of these

options. The first difference between the two frameworks is the filling-in of the evaluation of the alternatives. In the original conceptual framework this process starts with the determination of evaluative criteria, whereafter beliefs, attitudes, and an intention to choose, are formed. However, in view of the fact that until now no studies revealing information on any of these stages relating to care decision-making have been available, this process appears a black box. In order to gain insight into this process we started by studying the evaluative criteria that elderly community residents use in evaluating alternative care arrangements. Therefore, the evaluative criteria were inserted in the PDM as an influencing factor of the development of preferences, whereas the other elements of the evaluation process remained a hidden black box. Both, the fact that the evaluation criteria originally were the foundation of the evaluation process and the fact that elderly people themselves determine these criteria should be kept in mind.
In the PDM we assume the intention to choose to be comparable with the preference to choose, so the outcome of the evaluation of alternatives is the preference for a particular care arrangement. Because we are only interested in understanding the preference development, the outcome of the evaluation process is the end point of the PDM.

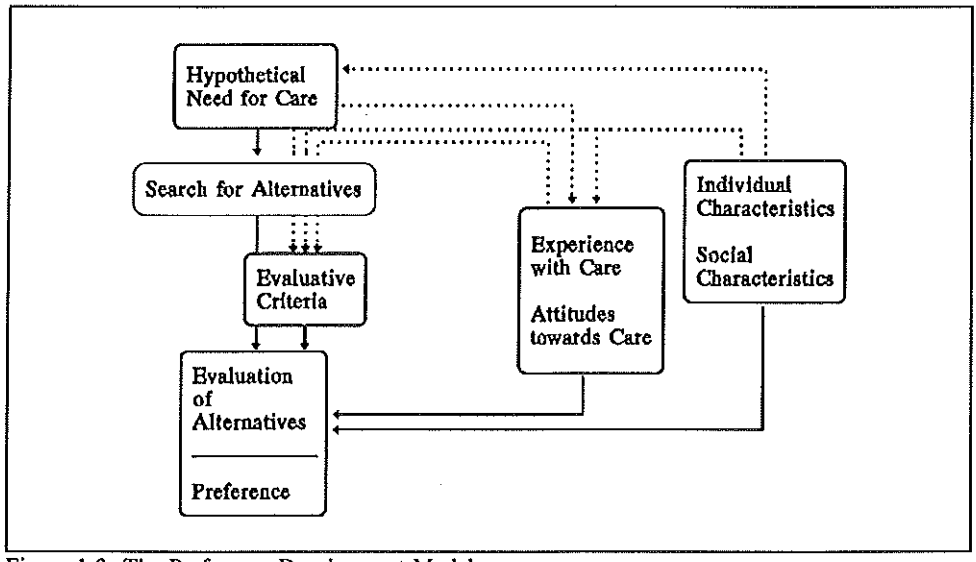

Figure 1.3. The Preference Development Model

The PDM focuses primarily on the development of preferences, and on the factors influencing the preferences. From the original conceptual framework it becomes clear that the following influencing factors can be distinguished: the evaluative criteria, the individual and social characteristics, the previous experience with receiving care and the generalised attitudes towards receiving care. Since the evaluative criteria are the foundation of the evaluation process, they are obviously closely connected to the evaluation of

the alternatives and therefore to the selection of a preference. Moreover, are the evaluation criteria chosen by the elderly themselves and were they determined for selected care-need situations. In de PDM de evaluation criteria are supposed to be the most direct influences on the preferred alternative.
Regarding the other influencing factors the original conceptual framework did not suggest any hierarchy. However, the two situational factors - previous experience and generalised attitudes - concern specific issues associated with receiving support, whereas the individual and social characteristics are generic features. Both situational influences relate to knowledge that is particularly relevant in care decision-making. Therefore, a more distinct influence of the situational factors on the evaluation of alternatives seems likely. Thus, in the PDM, the previous experience and the generalised attitude are assumed to have greater impact on the evaluation of alternatives than the individual and social characteristics. In Figure 1.3. mutual relationships among the influencing factors and the need for care are also presented (the dotted lines), although these will not be discussed in this thesis.

Global Operationalisation
The possible need for care, the trigger of preference development, was operationalised in four hypothetical care-need scenarios. The rationale for selecting four care-need situations was that research had indicated that the preference for care arrangements depends on the type of care required (for example housekeeping or personal care) and the expected duration of that care (Daatland, 1990; McAuley and Blieszner, 1985). We actually asked the respondents: "when you would need help for a longer period of time (over four weeks) with housekeeping activities, for example grocery shopping or doing your laundry, whose help would you prefer?" All possible options were put to the respondent. "Or would you like someone else to supply this kind of support?" The same questions regarding personal care and/or short-term care were also posed. The use of four well described situations enabled us to administer both standardised and different situations to each respondent, which considerably improved the comparability and the validity of the findings.
Respondents were asked to imagine themselves in the hypothetical situations and subsequently to state the person or organisation they most preferred to receive care from in each situation. In addition, respondents were told to ignore hindrances such as financial or organisational constraints. The conducted studies described in the following chapters were all based on the same principle; the preferred arrangements of elderly community residents for certain specified care-need situations were determined. Ideally, respondents could choose every alternative they could think of. However, in some studies the choice alternatives were limited.
In the subsequent studies we distinguish informal and professional care. Informal care relates to support given by relatives, other family, friends etc. and is not paid for. Professional care is supplied by qualified personnel from home help/home care organisations, private organisations or in an institutional setting and is paid for.

The evaluative criteria were appointed by asking the respondents for what reasons they made a particular choice. In a first, exploratory study we asked the respondents to state as many evaluative criteria as they could think of. In a subsequent study we administered cards with evaluative criteria which covered all the criteria that were mentioned in the former study. The criteria only concerned the pros and cons of the preferred alternative and the major competitor(s) instead of all possible alternative arrangements. In fact, our method of assessing the evaluative criteria reveals not only the criterium but also the belief of the respondent on the score of the preferred alternative or the major competitor on this criterium. A respondent states, for example, that he/she prefers the help from a home care worker because these workers deliver high quality care. Thus, the evaluative criterium is the preference for high quality care and the belief is that the home care worker is delivering care of this kind.

Preferably, the previous experience with receiving care was assessed for all types of support and for an extended retrospective period. An eight item scale 'receptivity towards informal support' was used to assess the generalised attitudes towards care. The operationalisation of both these variables and the individual and social characteristics is described in detail for the various studies in the next chapters.

The data analyses can roughly be distinguished in three parts. First, the preferences of various populations of elderly community residents are described using descriptive statistics. Secondly, the impact of influencing factors on the development of preferences is analyzed by means of chi^2-tests and logistic regression models. Due to the diversity and the probability of choosing more than one, the evaluation criteria could not be fitted in the logistic regression models. Therefore, analyses of the results of these assessments are presented separately.

In order to execute the determinant analysis the use of discriminant function analysis (DFA) seemed obvious. However, as DFA requires a normal distribution of variables and because our data did not satisfy special requirements of DFA on the variance-covariance matrix, this technique could not be utilised. Therefore, backward stepwise logistic regression analysis for polytomous dependent variables was used to explore which of the determinants explained and predicted the preferences of the elderly. This technique is chosen because the dependent variable consisted of more than two categories. The coefficients produced by ordinary logistic regression analysis represent the change in the log of the expected odds for the dependent variable with a unit change in the independent variable. As the dependent variable has three categories, for every independent variable two coefficients are calculated. This coefficients do not have a simple interpretation in the way that the coefficients of ordinary logistic regression do. We therefore illustrate the effects of each variable in the regression model by comparing the probability of choice of care of a reference person with the probability of choice of care of a person who differs from the reference person only on that variable. The reference person represents a 'common denominator' respondent. In order to get an impression of the quality of the model a goodness of fit chi-square is presented, including a p-value. This p-value ranges from 0 to 1, a p-value of 1 represents the model that best fits the underlying data.

1.6 Objectives of the Thesis

The purpose of this thesis is to provide knowledge on the preferences of elderly community residents for care and to determine which factors affect these choices. The total project that was conducted to collect the required information consisted of more studies that were composed step by step to enlarge the body of knowledge. The different chapters in this thesis represent the stepwise composition. In each study the main pathway of preference development - the assessment of preferences in various care-need situations - was a standard procedure. The analysis of the supposed determinants is presented in the consecutive chapters; the last chapter describes the total model. The content of the chapters is presented schematically in Table 1.1.

Table 1.1. Overview of the composition of the chapters 2 to 7.

	Population	Ind./Soc. indicators	Experient. indicators	Attitudinal indicators	Evaluative criteria	Follow-up data
Chapter 2	75+, singles	x	x			
Chapter 3	65+, represent.	x	x			
Chapter 4	65+, represent.	x	x	x		
Chapter 5	65+, disabled	x	x	x		x
Chapter 6	60+, disabled				x	
Chapter 7	65+, disabled	x	x	x	x	

In chapter 2 a study is presented on the preferences for care of single elderly aged 75 years and over. Respondents were asked which care provider they would prefer in four different (hypothetical) care-need situations. The influence of individual and social factors and the experience with care on their preferences was assessed. By means of ordinary logistic regression analysis the impact of the determinants on the respondent's choice for either informal or professional home care in long-term care situations was analyzed.

Chapter 3 presents the care preferences of a representative sample of older adults of 65 years and over. With an eye to the preference development model this study covers the same part as the former study; individual and social factors, as well as the experience with care, were related to the preferences of the respondents in various care-need situations. However, in this study more detailed information on the three determinant categories was available.

Use of logistic regression analyses for polytomous dependent variables enabled us to identify the most important determinants for choosing either informal or professional home care or residential care in case long-term care would be needed.

In chapter 4 the research is expanded with the attitudes towards informal and professional care on the basis of an 8-item scale 'receptivity towards informal support'. The relationship between the attitude of the elderly and their preferences in the four care-need situations is examined. Thereafter, the influence of individual, social and experiential indicators, as well as the attitude of the elderly towards care-preferences, is analyzed. Since the same three options as mentioned earlier were distinguished, the analyses were also performed by means of logistic regression analysis for polytomous dependent variables. This report concerns the same representative sample as was presented in the former chapter.

Chapter 5 handles on a sub-sample of moderately disabled elderly persons of 65 years and over that was taken from the representative sample (chapter 3 and 4). The chapter describes the preference development of these persons during a one-year follow-up. Furthermore, the effect of static and dynamic individual, social, experiential and attitudinal indicators on the preference development is examined by means of logistic regression analysis for polytomous dependent variables.

Chapter 6 focuses on the evaluative criteria of indigent older adults aged 60 years and over regarding their preferences in cases of long-term care decision-making. An overall picture of the evaluative criteria which the elderly use to evaluate various alternatives for long-term care is assessed by means of case studies. Thereafter, a quantitative approach was used to identity the evaluative criteria that were considered as the most important by the elderly. The evaluative criteria reported can be distinguished in motives in favour of informal support and motives in favour of professional services.

Chapter 7 is the final chapter in which the preference development model is worked out. In addition to the individual, social, experiential and attitudinal indicators, the evaluative criteria of the elderly were assessed in a population of moderately disabled elderly aged 65 years and over. Individual, social, experiential and attitudinal determinants were included in a logistic regression model for polytomous dependent variables which determined their impact on the choice between informal support, home help/home care and private services in case long-term care would be needed. The most important evaluative criteria of the elderly in favour of these same three options: informal support, home help/home care and private services, were described as well. Finally, the results of both analyses were compared and discussed.

In Chapter 8 the results of the previous chapters are briefly summarised and discussed in the light of the objectives of this thesis. Additional to the qualities and limitations of the studies, the similarities and differences between the outcomes will be highlighted. Finally, the relevance of research on the care decision-making process will be elaborated upon.

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2

Preferences for Care: A Study of Elderly Community Residents Living Alone[1]

Summary

This study presents the preferences for care of alone living elderly community residents on the basis of four hypothetical care-need situations for which they were questioned and asked to state the most preferred care provider. In addition, the influence of individual and social characteristics of the elderly as well as their previous experience with care on the preferences was examined. The preference for informal care declines when the expected duration of care is extended and/or the person requires personal care. Currently receiving professional housekeeping assistance and depressive complaints, especially in combination with a high socio-economic status, were found to be factors related to an increased preference for professional care. Those who already received informal care or older respondents showed increased preferences for informal care. Policymakers should profit from knowledge of the elderly's preferences for care.

2.1 Introduction

During the last two decades a number of changes has been introduced in the care of the elderly on the pretext of integration and participation of elderly people in society. These developments were based on the premise that, in this way, the wishes of the elderly would be met. However, in view of the fact that little scientific knowledge on the preferences of the elderly for care is available, further research would seem to be indispensable.

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[1] Based on Wielink, G., M.M.Y. de Klerk and R. Huijsman. 1995. Preferences for care: results of a study of the elders living alone. *Tijdschrift voor Sociale Gezondheidszorg* 73:367-374.

Dutch research on the preferences of the elderly for care arrangements was primarily based on the question of whether they preferred needed help from acquaintances or from professionals (De Klerk and Huijsman, 1989; De Klerk and Huijsman, 1992; GG & GD Utrecht, 1992; Hakens and Knipscheer, 1988; Heuvelmans-Hoppenbrouwers, 1979; Kempen and Suurmeijer, 1989; Linschoten, Leemeijer and Van den Heuvel, 1988; Van Dinter and Witteveen, 1991). Both the alternatives are not univocal; help from acquaintances can be interpreted as the support of children, of neighbours or of friends. Professional help can be understood as home help/home care services or as institutional care. Besides, the Dutch health care includes types of support that elderly people might not think of at all when considering these options, for example private services or voluntary support. When elderly people who prefer the support of acquaintances were asked to choose between the help from children, other family members, friends or neighbours, the majority chooses the support of their children (Daatland, 1990).

From foreign research it is known that the care preferences of the elderly depend largely on the type of care required and the expected duration of that care (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990; McAuley and Blieszner, 1985). Whereas most elderly people would rather see their children do the daily chores such as housework, shopping or cooking, they favoured assistance arranged by their insurance company in case they would require personal care (Brody, Johnsen and Fulcomer, 1984). Norwegian research has indicated that the preference for assistance from children decreased when the care is needed for a longer period of time, or becomes personal care (Daatland, 1990).

Until now, research on the selection of preferred care arrangements has mainly focused on the elderly as a homogeneous group. Consequently, little attention has been given to typical features of the elderly that influence their preferences. Research of Hakens and Knipscheer (1988) and of De Klerk and Huijsman (1989) showed an increased preference for the help of acquaintances of the elder respondents. From the research of Kempen and Suurmeijer (1989) it appeared that already receiving professional care was related to a preference for this type of support. Table 2.1. presents an overview of Dutch studies on the preferences for the help of either acquaintances or professional helpers. The table shows the percentage of the respondents that prefers the help of acquaintances; this varies from 17% until 64%. Furthermore, some characteristics of the research populations are given. The information seems to imply an increase in the preference for professional care when the average age of the research population is lower. Another reason for the variation in the preferences of the elderly was brought forward by Daatland (1990). He signalled a vigorous increase in the preferences for professional help in 1985 compared to 1969, which he attributed to a larger availability and familiarity of professional services. The studies in Table 2.1. also show an increased preference for professional support over time. The variation in the percentage of the elderly who prefer help from acquaintances or professional services can probably be explained, in part, by the global research question, in part by variations in research populations and, in part, by trends over time.

Table 2.1. Overview of Dutch studies on the preferences of elderly people for either acquaintances or professional care.

Author(s)	Year	N	Age	Research population	Preference for acquaintances (%)
Heuvelmans-Hoppenbrouwers	1974	455	65+	independently living	59
Hakens et al.	1987	880	65+	indendently living	50
Linschoten et al.	1987	192	65+	independently living	53
De Klerk et al.	1988	734	65+	independently living	47-54
Kempen et al.	1989	101	60+	independently living	42-56
GG & GD Utrecht	1991	351	65+	not indicated pos. indicated residential care	52-64
De Klerk et al.	1991	372	55+	independently living	32-37
Van Dinter et al.	1991	182	55+	independently living	17

In order to bring future policy on the care for the elderly in line with their preferences, it is necessary to gain insight into the preferences for the various care arrangements. A better adaptation to the wishes of the elderly may be achieved by identifying typical features which influence their preferences. In the present study we investigate the preferences of the non-institutionalised elderly aged 75 and over who live alone. We go on to discuss the effects of a variety of influencing factors on these preferences. Finally, we discuss the relevance of our findings for Dutch policy on the care of the elderly.

A Conceptual Model

Based on a Consumer Behaviour Model (Engel, Blackwell and Miniard, 1986) a conceptual framework is proposed which describes not only the consecutive steps of preference development but also the influence of individual and social characteristics and previous experience with receiving care on this development (Figure 2.1.).

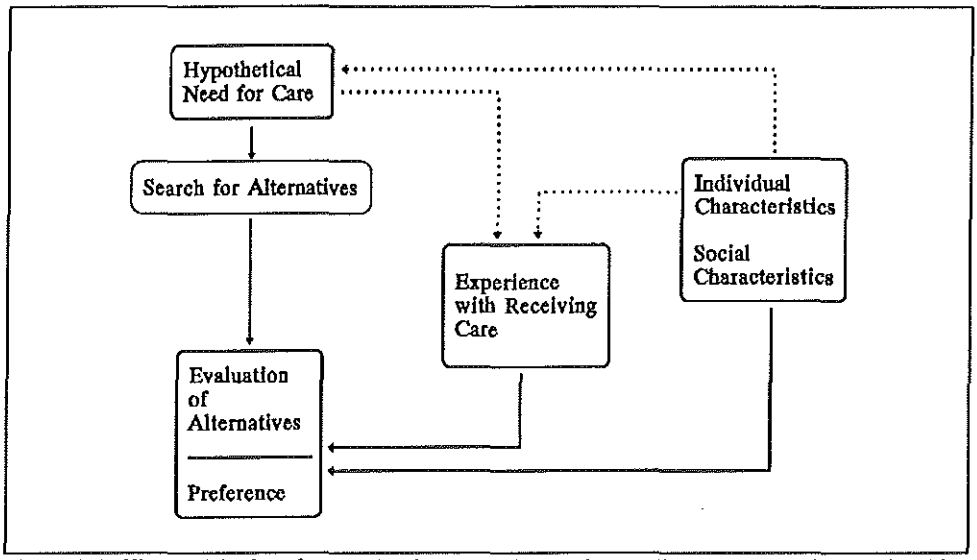

Figure 2.1. The model of preference development; the continuous lines represent the relationships addressed in this study.

The purpose of the present study was to examine the preferences of the elderly in four hypothetical care-need situations, and to establish whether the experience with care services or individual and social characteristics of the respondents influence these preferences. The use of multivariate analyses enables the identification of the factors most relevant to explaining and predicting the preferences for various care services.

2.2 Methodology

Data were gathered as part of a study on the demand for and the possibilities of implementation of technical aids in the lives of elderly people (De Klerk and Huijsman, 1993).

The Research Population

At the end of 1992 we approached 916 non-institutionalised elderly people aged 75 years and over who lived alone, to participate in an interview on home care (technology). The elderly were all living in six municipalities in the three 'Randstad' provinces of the Netherlands. The addresses were randomly selected from local community registers. For a number of reasons - refusal (227), unable to participate (42), wrong address (118) and unknown (31) - 418 of the elderly we initially approached did not participate in the study. We therefore interviewed 498 elderly people, a response rate of 54% (62% when corrected for 'wrong address').

The average age of the respondents was 81 years old and not unexpectedly the percentage of women in the study population was high (82%). The majority (87%) of respondents were widowed, the others were either married (0.5%), divorced (4.5%) or were never married (8%). A comparison of the demographic information of our respondents with that of the non-institutionalised 75's among the general Dutch population shows that our research sample may be considered a representative reflection of Dutch non-institutionalised elderly people who live alone.

Operationalisation of Variables

Need for care: The need for care is defined by means of four hypothetical care-need situations: the need for short-term housekeeping assistance, long-term housekeeping assistance, short-term personal care and long-term personal care. To establish a short period for which the respondents would seriously consider informal care, we set four weeks as the dividing line between short-term and long-term care.

Alternatives: The basic assumption was that Dutch elderly are familiar with the regular care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991). The respondent could choose one from the following answers: home care by children, neighbours/friends/acquaintances, private services, or home help/home care organisations, residential care or co-residence with family.

Preferences: The respondents were asked to imagine themselves in the four hypothetical care-need situations and to state the most preferred person or organisation from whom to receive care in each situation. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations.

Experience with care: Registered were whether the respondents received informal or home help/home care services at the time of the interview (no information was available on the period before the interview). We distinguished between assistance with housekeeping activities and personal care.

Individual characteristics: The following characteristics were assessed: age, gender, level of education, level of income, feelings of depression and loneliness. Loneliness was assessed by means of the loneliness scale of De Jong-Gierveld and Kamphuis (1985). Zung's self rating depression scale was used to determine depressive complaints of the respondents (Zung, 1965).

Social characteristics: Whether or not the respondents had (living) children was also recorded.

Data Analyses

Chi-square tests were used to examine the univariate relationships between the dependent (the preferences) and the independent variables (the determinants) in the various care-need situations. Backward stepwise logistic regression analysis was used to explore which of the independent variables explain and predict the preferences of the elderly. Since we expected independent relationships between all these variables and the preferences, the backward procedure was chosen.

In order to simplify the interpretation of the results of the logistic regression analyses we checked all independent variables to determine the ability to dichotomise them. Except for the age of the elderly which was a continuous variable, all independent variables were dichotomised. The operational definitions of these variables are given in the appendix. Information on the psychological individual characteristics is missing in this table, however. Regarding these characteristics the respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of the scores for each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups. In the logistic regression model the levels of income and education were also taken into account as a combination variable (socio-economic status). In the analyses (uni- and multivariate) we only distinguished professional and informal home care and residential care; co-residence with family was left out of consideration because of the small number preferring this type of care. Both help from children, neighbours, friends and acquaintances and the help received from private services and home help/care were grouped so as to constitute informal and professional care respectively.

2.3 Results

Preferences

For short-term housekeeping assistance: 40.0% of the respondents preferred to receive help from their children; 33.3% chose the assistance of a home help; 16,5% was in favour of private services; and 10.2% of the respondents preferred to be assisted by neighbours, friends or acquaintances (Table 2.2.).

Table 2.2. Preferences of respondents in four hypothetical care-need situations (percentages).

	Housekeeping activities		Personal care	
	short-term	long-term	short-term	long-term
N	490	493	489	494
children	40.0	31.0	24.3	20.9
neighbours/friends/acquaintances	10.2	-	3.9	-
private services	16.5	14.8	-	-
home help services	33.3	42.8	-	-
home care services	-	-	71.8	65.1
residential care	-	10.6	-	13.6
co-residence with family	-	0.8	-	0.4

- no possible answer

In case housekeeping assistance is needed for a longer period, the percentage choosing their children declined (31.0%), whereas the percentage opting for home help services increased (42.8%). About the same percentage of the respondents prefers private services (14.8%). The remaining respondents would prefer residential care in this situation (10.6%). Only a very small percentage (0.8%) would prefer to live-in with a family member.

The majority of the respondents would prefer personal care from home care services for both short-term care (71.8%) and long-term care (65.1%). The percentage preferring assistance from children was considerably smaller; 24.3% for short-term care and only 20.9% for long-term care. In case of long-term personal care, 13.6% of the respondents were in favour of residential care, and only 0.4% would choose to move in with a family member.

In summary, these results show that the preferences shift from more informal to professional care as soon as the expected duration of care becomes longer and/or concerns personal care rather than housekeeping assistance.

Table 2.3. Relationships between experience indicators, individual and social characteristics as independent variables and the preferences of the elderly in four care-need situations as dependent variables (Chi-square test).

	Housekeeping assistance		Personal care	
	short-term	long-term	short-term	long-term
Experience with receiving care				
home help (housekeeping)	64,59***	25,79***	13,0**	9,25*
home care (personal care)	3,79	4,98	0,27	10,41*
no informal care (housek.)	41,11***	37,01***	45,85***	33,24***
no informal care (pers. care)	1,14	3,71	4,23	1,82
Individual and Social characteristics				
high education	18,86***	21,15***	11,56**	17,12***
high income	9,13*	14,61**	4,81	4,64
no children	38,25***	16,16**	18,70***	3,99
loneliness	12,27**	10,90*	6,80*	6,18
depressiveness	0,80	1,39	4,39	5,48
df	3	4	2	3

$p < 0,05$; ** $p < 0,01$; *** $p < 0,001$

The Influence of Experience with Receiving Care

Table 2.3. shows the significant univariate relationships between the preference for professional help and various determinants in the four care-need situations. Presented are the subgroups within the study group that were found to be positively related to one or more of the care options. Respondents who experienced professional assistance with housekeeping activities had a stronger preference for professional home care in all four care-need situations compared to those who did not. Those who experienced informal care, on the other hand, were shown to have a higher preference for informal home care in the four care-need situations compared to those who did not. The experience with professional personal care appeared to be related to a preference for professional home care in the long-term personal care situation. The experience with informal personal care was not found to be related to the preferences of the respondents.

The Influence of Individual and Social Characteristics

In all care-need situations respondents with a higher education level preferred professional home care above informal home care compared to the those with less education. Respondents that are lonely and those without children showed a preference for professional care in three of the four care-need situations. A high income is related to a preference for professional services in case housekeeping assistance is needed. No relationship is found between depressive complaints and the expressed preferences of respondents.

Table 2.4. Logistic regression model of the preference for home help/home care services or informal care in case long-term housekeeping assistance is needed; experience indicators and individual and social characteristics.

	Coefficient	Standard error	Exp. Coeff. (Odds Ratio)
constant	1,84	1,20	
home help (housekeeping)	1,42***	0,31	4,15
depressiveness	0,63*	0,27	1,88
depressiveness * high education	0,36*	0,15	1,43
age^2	-0,00***	0,00	0,99
age^2 * informal care	-0,00*	0,00	0,99

Improvement Chi^2 = 72,49***, df=5 / * p < 0,05; ** p < 0,01; *** p < 0,001

The following variables were included in the model: Age, Age^2, Gender, Education, Income, Socio-economic status, Loneliness, Depressiveness, Children, Professional care (housekeeping and personal care respectively), Informal care (housekeeping and personal care respectively) and interaction effects between the main effects.

Table 2.5. Logistic regression model of the preference for home help/home care services or informal care in case long-term personal care is needed; experience indicators and individual and social characteristics.

	Coefficient	Standard error	Exp.Coeff. (Odds Ratio)
constant	0,37	0,49	
home help (housekeeping)	1,31***	0,37	3,69
depressiveness			
* high socio-economic status	0,85***	0,26	2,35
depressiveness	0,68*	0,29	1,98
informal care (housekeeping)	-1,58***	0,27	0,20

Improvement $Chi^2 = 69,96^{***}$, df=3 / * $p < 0,05$; ** $p < 0,01$; *** $p < 0,001$

The following variables were included in the model: Age, Age^2, Gender, Education, Income, Socio-economic status, Loneliness, Depressiveness, Children, Professional care (housekeeping and personal care respectively), Informal care (housekeeping and personal care respectively) and interaction effects between the main effects.

Predicting Choices: Long-Term Housekeeping Assistance and Personal Care

Backward stepwise logistic regression analysis was used to explore which of the independent variables explain and predict the preferences of the elderly in case they would need assistance for a longer period of time. Receiving professional housekeeping assistance appeared to be a strong predictor of the preference for professional services in case long-term housekeeping is needed (Table 2.4.). Depressive complaints, particularly in combination with a higher level of education, were found to be related to the preference for professional services. Respondents with a higher age, especially those who receive informal housekeeping assistance, had a stronger preference for informal support compared to the younger ones.

Table 2.5. presents the results of the logistic regression model of long-term personal care. Again receiving professional housekeeping assistance appeared to be a strong predictor; those that receive professional housekeeping assistance showed a stronger preference for professional services. Depressive complaints, particularly in combination with a high socio-economic status, was also found to be related to a preference for professional services. Respondents that received informal housekeeping assistance had a stronger preference for informal support than those who did not.

2.4 Discussion

From the results of this study can be concluded that many elderly people prefer professional help. As in a study of Daatland (1990), the percentage of the elderly that chooses professional services appeared to strongly depend on the type of care needed and the expected time duration that care will require. Whereas almost 50% of the respondents would prefer help from informal helpers for short-term housekeeping, less than a quarter prefers this kind of support when long-term personal care is needed. If the respondents would be in need of long-term personal care, over 60% prefer the help from home care services and almost 15% would apply for residential care.
The preference for informal support is mainly a choice for the help of children, which confirms the results of former research (Daatland, 1990). As has been determined in other studies (Boom and Suurmeijer, 1989; De Klerk and Huijsman, 1989; Kempen and Suurmeijer, 1989; Linschoten, Leemeijer and Van den Heuvel, 1988) our results showed that moving in with family members no longer has preference among older people. Most elderly people prefer to receive professional services at home; a small percentage (about 15%) would rather apply for residential care. These results are in agreement with earlier life preferences research (Houben, 1985).
The results of the logistic regression analyses (Table 2.4. and 2.5.) showed that both the experiential and the individual and social characteristics of the respondents influence the preferences of the elderly. Both types of long-term care (housekeeping assistance and personal care) are determined by almost the same predictive variables.
The experience with housekeeping assistance appeared to be a strong predictor of the preferences of elderly respondents. The preference for professional services was found to be strongly related to already receiving professional home care. These results imply the induction or stabilisation of a positive attitude and even a preference for this type of services. However, an over-representation of those who previously had a preference for this type of care and therefore applied for it, might be another reason of the found effect. Due to the cross-sectional design of this study, this last effect can not be totally ruled out. In research of Kempen and Suurmeijer (1989) a relationship between receiving professional home care and preferring this type of support was also found.
Elderly people who receive informal support were shown to have a stronger preference for this same type of help. These findings relate to the attendance of favourable conditions to receive informal support and positive experiences of those elderly with this type of help. Nevertheless, those who previously had a preference for this type of support will be over-represented in this group as well.
Respondents of a greater age who also receive informal support were more often found to prefer informal help with housekeeping activities. The relationship between a greater age and the preference for informal support was described earlier (De Klerk and Hijsman, 1989; Hakens and Knipscheer, 1988). Our results indicate a reinforcement of this effect where the elderly also already receive informal support.

Depressive complaints, socio-economic status and age also appeared to be related to the preferences of the elderly. Respondents with depressive complaints more often choose professional services. Where these elderly also have a higher educational level or socio-economic status, this effect is strengthened. In their research, McAuley and Blieszner (1985) also showed a relationship between the preferences of the elderly and their mental condition. Other research presented an increased use of health services by persons with depressive complaints (Bisscheroux and Frederiks, 1986; Kempen, 1990[a]). Although the causality of the relationship between depressive complaints and the use of health services is questionable, our results might indicate a relationship between depressive complaints of elderly persons and their preference for professional services.

Just as in previous research (De Klerk and Huijsman, 1989; Hakens and Knipscheer, 1988) a relationship between a greater age and a stronger preference for professional services was found. From our results it can not be concluded whether this effect is the result of a generational effect or a shift in the preferences of elderly people when becoming older. Longitudinal studies should answer this question decisively.

Consideration of some methodological aspects of the study would convenience the interpretation of the results of this study. The need for care was assessed on the basis of four hypothetical care-need situations in which the respondents were asked to project themselves. Nevertheless, discrepancies between the actual need for care of the respondent and some or all of these situations are likely. We therefore checked the relationship between the actual need for care of the respondents and their preferences. The actual need for care of the respondents was operationalised by means of de ADL- and the IADL-validity (Kempen and Suurmeijer, 1990[b]) and the subjective health status. Univariate analyses showed a relationship between poor ADL-validity and the preference for professional services in case long-term care was needed. The multivariate logistic regression analyses showed no significant relationship between the actual need for care and the selection of care arrangements when long-term housekeeping assistance or personal care was needed. These findings are in agreement with the conceptual model which our research is based upon (Figure 2.1.), a model in which only an indirect relationship between the need for care and the preferences for various care arrangements is indicated.

A second aspect that deserves attention is the way in which the preferences were assessed. The elderly respondents were asked to state the most preferred helper in four care-need situations. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations. Whether their preference could be realised was not important. Despite this emphatic order to the respondents we can not totally be sure that the actual preferences of the respondents were assessed this way. The influence of preference shifts over time or the tendency to give a socially desirable answer cannot be ruled out. However, we feel that these disadvantages do not outweigh the fact that this research fills an existing gap in the knowledge on the preferences of elderly people to a considerable extend.

The next aspect concerns the research population; a group of elderly people of 75 years and over who live alone and are not selected on the basis of their need for care. Making choices for care services is mainly a matter for indigent elderly people, with or without the support of a dialogue with network members. The preferences of the elderly in our research population might deviate from the preferences of the elderly in general where the subject of our research is concerned: care services available to the elderly in need of help. However, this study revealed that a greater need for care of elderly people is related to a stronger preference for professional services. This might indicate that the more indigent the elderly, the stronger the preference for professional services.
We would like to make some final remarks on additions to, and improvements of, our research design. A longitudinal design would enable us to test causal relationships as well as to determine the presence of timetrends. The assessment of the experience with care in this study was limited to the help received at the time of the interview. Ideally, the previous experience with informal and professional home care should be assessed for the preceding several years. Furthermore, additional factors which might also influence the preferences of older persons may be considered. For example, the general attitudes of the elderly towards receiving informal and/or professional support. Moreover, the influence of network members on the choices of the elderly is well-known as an influential phenomenon (Allen, Hogg and Peace, 1992; Pratt et al., 1989).

Finally, we would like to address a few important quandaries that might occur in the future policy plans of the Dutch authorities on the care of the elderly. Over the last few years, these discussions have been emphasising the importance of increased support for the elderly by informal helpers (Thuiszorg in de jaren '90: notitie over de toekomstige ontwikkeling en stimulering van de thuiszorg, 1991). However, the results of our study indicate a strong preference of the elderly people for professional services instead of informal support.
A few social developments make a reasonable case for a further increase in the preference for professional services. Our analyses show that receiving professional help with housekeeping assistance and a high socio-economic status are both strong predictors for the preference for professional services. The percentage of the elderly who receive professional housekeeping assistance has increased considerably over the last few years and will probably continue to increase in the coming few years (Landelijke Vereniging voor Thuiszorg, 1991). The socio-economic status of the elderly is another parameter that will increase in importance in the future (Huijsman, De Klerk, Groenenboom and Rutten, 1994).
A second development which is rather thwarting government plans is the fact that recent research has shown that the number of society members providing informal support will remain almost stable over the next two decennia (De Boer et al., 1994). In view of the expected increase in the extend and intensity of the demand for home care services, this development will certainly lead to an insufficient supply of informal support.

In conclusion it can be stated that elderly people who live alone in general prefer professional services and this trend might even be reinforced in the future. In view of the results of this study, the Dutch government should reconsider their plans to stimulate informal support, particularly in light of the shortfall expected in the future of those offering this type of support.

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Appendix

Table 2.A. Characteristics of the study population and operational definitions of the independent variables (N=498).

Variable	Definition	%
Experience with receiving care		
home help (housekeeping)	1 = home help services at the time of the interview	27.5
home care (personal care)	1 = home care services at the time of the interview	5.8
informal care (housekeeping)	1 = informal housekeeping care at the time of the interview	73.5
informal care (personal care)	1 = informal personal care at the time of the interview	34.6
Individual and Social characteristics		
age (years)	continuous (multivariate analyses)	
	0 = 75-79 (univariate analyses)	44.6
	1 = 80-84	36.7
	2 = 85+	18.7
gender	1 = female	81.7
education level	0 = only primary education	82.7
	1 = also advanced education	17.3
income	0 = a state pension + less than 200 guilders	55.4
	1 = income above the state pension + 200 guilders	44.6
socio-economic status[a]	0 = low	51.6
	1 = high	48.4
having children	0 = having no children (alive)	21.8
	1 = having children (alive)	78.2

[a] Respondents were requested to answer a series of questions relating to the variable and responses were scored. The sum of the scores for the variable was calculated and the study population was dichotimised by dividing it in two (almost) equal groups

3

Preferences for Care: A Study on Elderly Community Residents[1]

Summary

This study investigates which care provider an elderly person living independently and aged 65 and over would prefer most should he or she be in need of such care. Four (hypothetical) care-need situations were distinguished and respondents were requested to state their preference in each situation. In addition, the influence on these preferences of both individual and social characteristics of the elderly and their previous experience with care was examined. A preference for informal care declines when the expected duration of care is extended and/or the person requires personal care. Previous experience with either professional or informal care increased the likelihood that that type of care would be preferred. Other predictive factors were age, gender, socio-economic status and the level of well-being. More research on the preferences of the elderly would enable health care professionals and government to adjust their policies to accommodate the wishes of the elderly.

3.1 Introduction

During the past two decades health care professionals have been increasingly involved in planning the future supply of services for the elderly. This phenomenon is based on two premises: to establish an equilibrium between the demand and supply, and to deliver high quality care. Until now most research in this field has focused on the determinants influencing the use of services in order to predict future requirements and developments.

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[1] Based on Wielink, G., R. Huijsman and J. McDonnell. 1997. Preferences for care: a study of the elders living independently in the Netherlands. *Research on Aging* 19:194-218.

Earlier studies began with an examination of the factors related to the use of long-term institutional care (Branch and Jette, 1982; Deimling and Poulshock, 1985; Greenberg and Ginn, 1979). Thereafter, many researchers have explored the determinants of the use of community care. Some focused on professional services (Logan and Spitze, 1994; Soldo, 1985; Wister, 1992), whereas others emphasised informal care (Lee, Dwyer and Coward, 1993). The use of the results of these studies for the planning of future services is based on the concept of revealed preferences: the actual use of services is supposed to represent the preferences of the users. Research on the actual preferences of the elderly for various care arrangements is scarce (Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986; Eustis, Kane and Fischer, 1993; Soldo, Wolf and Agree, 1990). The research reported here focuses on the preferences for care arrangements in various hypothetical need situations (differing in type and duration of care). The target group consisted of persons aged 65 and over who lived independently.

The rationale for selecting various care-need situations is that research has suggested that the care preferences of the elderly depend largely on the type of care required and the expected duration of that care (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990; McAuley and Blieszner, 1985). Whereas most elderly people would rather see their children do the daily chores such as housework, shopping or cooking, they favoured assistance arranged by their insurance company in case they would require personal care (Brody, Johnsen and Fulcomer, 1984). European research has indicated that the preference for assistance from children decreased when the care is needed for a longer period of time, or becomes personal care (Daatland, 1990).

Until now, research on the selection of preferred care arrangements has mainly focused on the elderly as a homogeneous group. Consequently, little attention has been given to typical features of the elderly that influence their preferences. Studies that have focused on the determinants of preference have shown individual and social characteristics, as well as experience indicators, to be associated with the selection of various care arrangements (Brody, Johnsen and Fulcomer, 1984; McAuley and Blieszner, 1985). The conceptual model described below illuminates these relationships in more detail.

In order to bring future policy on the care of the elderly in line with their preferences, it is necessary to gain an insight into the preferences for the various care arrangements. A better adaptation to the wishes of the elderly may be achieved by identifying typical features which influence their preferences. In the present study the preferences of the non-institutionalised elderly aged 65 and over are investigated. Then, the effects of a wide variety of influencing factors on these preferences are discussed. Before the results of our research are presented, a conceptual model of the development of preferences for particular care arrangements, and the factors which influence them, will first be described.

A Conceptual Model

Based on a Consumer Behaviour Model (Engel, Blackwell and Miniard, 1986) a conceptual model is proposed which describes not only the consecutive steps of preference development but also the influence of individual and social characteristics and previous experience with receiving care on this development (Figure 3.1.).

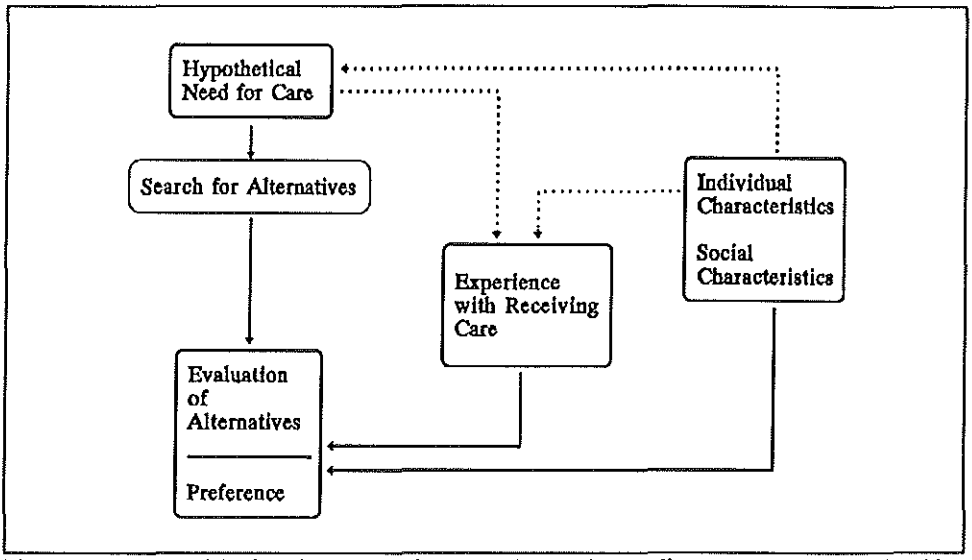

Figure 3.1. The model of preference development; the continuous lines represent the relationships addressed in this study.

The purpose of this present study is to examine the preferences of the elderly in four hypothetical care-need situations, and to establish whether the experience with care services, or individual and social characteristics of the respondents, influence these preferences. In addition, the effect of discrepancies between the hypothetical and the actual need for care on the development of preferences will be examined. The use of multivariate analyses enables the identification of the factors most relevant to explaining and predicting the preferences for various care services.

3.2 Methodology

Data were gathered as part of a larger study on the effects of psychosocial factors on functional status and the use of supportive and institutional care (Ormel et al., 1992).

The Research Population

General practitioners (GP's) from 12 medical practices in the northern region of the Netherlands selected all their patients who had attained the age of 65 years on January 1st 1993 (N=5834). In 1993 and early 1994 these people were approached for a face-to-face interview in their own home. Of the elderly approached, 2359 declined participation, 56 interviews were incomplete due to cognitive impairments of the respondents and 218 elderly were only interviewed briefly by telephone due to lack of research funds. After being interviewed, the respondents were handed out a questionnaire to be completed and returned to the researchers by mail; of these 142 did not respond. In addition, data on 68 respondents resident in an old-people's home were excluded as we were only interested in those living independently. Therefore, the analyses presented here are based on 2991 elderly persons living independently.

The mean age of the study group was 74.1 years (range 65-94). A majority (58.8%) of the respondents was female. Most respondents (55.7%) lived with a partner, 7.5% (also) lived with others and 36.8% lived alone.

Comparison of some basic characteristics of the research participants with the total Dutch population (65+) showed an almost equal percentage of males. Respondents aged 70 to 79 were somewhat overrepresented in the research population compared to the total Dutch population (37.0% versus 33.9%). In contrast, respondents aged 80 to 89 were a little underrepresented among the participants (12.9% versus 17.0%).

Operationalisation of Variables

Need for care: The need for care is defined by means of four hypothetical care-need situations: the need for short-term housekeeping assistance, long-term housekeeping assistance, short-term personal care and long-term personal care. To establish a short period for which the respondents would seriously consider informal care, we set four weeks as the dividing line between short-term and long-term care.

Alternatives: The basic assumption was that Dutch elderly are familiar with the regular care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991) . The respondent could choose one from the following answers: home care by children, neighbours/friends/acquaintances, private services, or home help/home care organisations, residential care or co-residence with family.

Preferences: The respondents were asked to imagine themselves in the four hypothetical care-need situations and to state the most preferred person or organisation from whom to receive care in each situation. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations.

Experience with care: Registered were whether the respondents received informal care at the time of the interview (no information was available on the period before the interview), and whether the respondents were receiving care from home help/home care organisations at the time of the interview or during the previous year. We distinguished between assistance with housekeeping activities and personal care.

Individual characteristics: The following characteristics were assessed: age, gender, household composition, living situation, level of education, level of income, (former) occupational status (based on the Treimcmp index; Treiman, 1977), well-being (assessing physical and social well-being, e.g., loneliness and safety), mental health (based on the MOS short-form general health survey; Stewart, Hays and Ware, 1988), satisfaction with life in general (Kempen and Ormel, 1992), feelings of depression and anxiety (based on the hospital anxiety and depression scale; Zigmond and Snaith, 1983), and personality characteristics: neuroticism and extraversion (based on the revised Eysenck personality questionnaire; Eysenck, Eysenck and Barrett, 1985).
Social characteristics: The following characteristics were assessed: the size of the network of the respondents, social functioning (Stewart, Hays and Ware, 1988) and the extent of receiving social support (Van Eijk, Kempen and Van Sonderen, 1994).
Actual need for care: In order to investigate the influence of the actual need for care of the respondents on the selection of care arrangements, this need was assessed by the need for support with activities of daily living (ADL) and instrumental activities of daily living (IADL; Kempen and Suurmeijer, 1990).

Data Analyses

Chi-square tests were used to examine the univariate relationships between the dependent (the preferences) and the independent variables (the determinants) in the various care-need situations. Backward stepwise logistic regression analysis for polytomous dependent variables (having more than two categories) was used to explore which of the independent variables explain and predict the preferences of the elderly. Since we expected independent relationships between all these variables and the preferences, the backward procedure was chosen. This way the first model includes all the independent variables and subsequently eliminates those variables that deliver no significant contribution to the model.
In order to simplify the interpretation of the results of the logistic regression analysis we checked all independent variables to determine the ability to dichotomise them. Except for the age of the elderly which was a continuous variable, all independent variables were dichotomised. The operational definitions of these variables are given in the appendix. Information on the psychic individual characteristics and the social indicators is missing in this table, however. Regarding these characteristics, respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of the scores for each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups.
In the analyses (uni- and multivariate) we only distinguished professional and informal home care and residential care; co-residence with family was left out of consideration because of the small number preferring this type of care. Both help from children, neighbours, friends and acquaintances and the help received from private services and home help/care were grouped so as to constitute informal and professional care respectively.

3.3 Results

Preferences

For short-term housekeeping assistance: 47.0% of the respondents preferred to receive help from their children; 26.5% chose the assistance of a home help; 19.0% was in favour of private services; and 7.5% of the respondents preferred to be assisted by neighbours, friends or acquaintances (Table 3.1.).

In case housekeeping assistance is needed for a longer period, the percentage choosing their children declined (36.8%), whereas the percentage opting for home help services increased (56.3%). The remaining respondents would prefer residential care in this situation (6.4%). Only a very small percentage (0.5%) would prefer to live-in with a family member.

The majority of the respondents would prefer personal care from home care services for both short-term care (64.1%) and long-term care (63.3%). The percentage preferring assistance from children was considerably smaller; 32.9% for short-term care and only 27.6% for long-term care. In case of long-term personal care, 8.6% of the respondents were in favour of residential care, and only 0.5% would choose to move in with a family member.

In summary, these results show that the preferences shift from informal to professional care as soon as the expected duration of care becomes longer and/or concerns personal care rather than housekeeping assistance.

Table 3.1. Preferences of respondents in four hypothetical care-need situations (percentages).

	Housekeeping activities		Personal care	
	short-term	long-term	short-term	long-term
N	2956	2917	2960	2884
children	47.0	36.8	32.9	27.6
neighbours/friends/acquaintances	7.5	-	3.0	-
private services	19.0	-	-	-
home help services	26.5	56.3	-	-
home care services	-	-	64.1	63.3
residential care	-	6.4	-	8.6
co-residence with family	-	0.5	-	0.5

- no possible answer

The Influence of Experience with Receiving Care

Table 3.2. shows the significant univariate relationships between preferences and determinants. Presented are the subgroups within the study group that were found to be positively related to one or more of the care options.

Table 3.2. Relationships between experience indicators, individual and social characteristics and actual need for care as independent variables and the preferences of the elderly in four care-need situations.

	Housekeeping assistance		Personal care	
	short-term	long-term	short-term	long-term
Experience with receiving care				
home help (housekeeping)	P*	P/R*	P*	P/R*
home care (personal care)	P*		P*	
informal care (housekeeping)	I*	I/R*	I*	I/R*
informal care (personal care)	I*	I/R*	I*	I/R*
Individual characteristics				
women	P*	P*		P*
advanced age	P*	R*	P*	R*
living alone	P*	P/R*	P*	R*
adapted housing	P*	P/R*	P*	R*
low education level	I*	I/R*	I*	I/R*
low income	I*	I/R*		I/R*
low occupation status	I*	I/R*	I*	I/R*
low level of well-being	P*	P*	P*	P*
poor mental health	P*	P*	P*	P*
poor satisfaction with life	P*	P*	P*	P*
feeling of depression	P*	P*		P*
feeling of anxiety	P*	P*	P*	P*
neuroticism	P*	P*	P*	P*
no extraversion	P*	P*	P*	P*
Social characteristics				
small network	P*	P*		P/R*
little social support	P*	P*		P*
low level of social functioning	P*	P*		P*
Actual need for care				
need for care (housekeeping)	P*	P*		P*
need for care (personal care)	P*	P*	P*	P*

I: an increased preference for informal home care
P: an increased preference for professional home care
R: an increased preference for residential care
* $p < 0.05$

Respondents who experienced assistance with housekeeping activities from a home help had a stronger preference for professional home care in all four care-need situations compared to those who did not. These respondents also tended to favour residential care in case they would need long-term care. The experience with personal care from a home care organisation appeared to be related to a preference for professional home care in the two short-term care situations.
Respondents who experienced informal care, on the other hand, were shown to have a higher preference for informal home care in the four care-need situations compared to those who did not. This experience was also found to be related to a higher preference for residential care in case of long-term care.

The Influence of Individual Characteristics
In case of a need for assistance female respondents, those living alone or in an adapted house and of advanced age, preferred professional home care above informal home care compared to men, those living with others or in a normal house and the younger respondents (Table 3.2.). Advanced age, living alone or in an adapted house were associated with an increased preference for residential care in case of long-term care. Lower education level, income or occupational status were related to a preference for informal home care in all four care-need situations. When long-term care is required, these characteristics also tend towards a higher preference for residential care. Compared with high functioning respondents, those with a low sense of well-being, a low level of life satisfaction, poor mental health, feelings of depression or anxiety and little or no extraversion and neuroticism had a stronger preference for professional home care.

The Influence of Social Characteristics
Respondents with a small network, little social support and a low level of social functioning were found to have a stronger preference for professional home care (Table 3.2.) than those with extensive social contacts. In case of long-term personal care, respondents with a small network also favoured residential care.

The Influence of the Actual Need for Care
A higher need was related to a preference for professional home care in all four care-need situations.

Predicting Choices: Long-Term Housekeeping Assistance
Results presented in Table 3.3. highlight the relationship between three long-term care choices and the different characteristics of individuals when compared with a given reference person (see definition in Table 3.3.).

Table 3.3. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term housekeeping assistance.

	Informal home care	Home help/care services	Residential care
reference person	31.1	65.6	3.3
Experience with receiving care			
home help (housekeeping)	15.6	81.9	2.5
informal care (housekeeping)	47.3	47.9	4.8
Individual characteristics			
men	41.3	53.5	5.2
age = 65 yrs	31.7	66.1	2.2
age = 85 yrs	30.2	64.7	5.1
living with a partner	27.8	70.8	1.4
living with other(s)	37.8	58.5	3.7
adapted housing	27.9	66.3	5.8
low education	36.7	60.5	2.8
low occupation status	32.9	61.7	5.4
low level of well-being	26.3	66.9	6.8
good mental health	35.8	61.2	3.0
Social characteristics			
strong social support	36.7	60.5	2.8
Actual need for care			
need for care	23.9	72.6	3.5

Definition of the reference person: a woman aged 75 years, living without a partner in a regular house, has high levels of education and occupational status, a high level of well-being and poor mental health, receives little social support and has no experience with home help/home care organisations or informal support for housekeeping or personal care and is not in need for care

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 6626, df = 8290, p = 1.00

This reference person represents a 'common denominator' respondent: a women aged 75 years, living without a partner in a normal house, has high levels of education and occupational status, a high level of well-being and a poor mental health, does not suffer from feelings of depression, anxiety or neuroticism, receives little social support, has no experience with home help/home care organisations or informal support for housekeeping or personal care and is not in need for care. Thus, compared to the reference person (who did not experience help from home help/home care organisations), respondents who experienced help from home help/home care organisations were far more likely to choose home help/home care services (81.9% versus 65.6%) at the expense of their choice for informal home care (15.6% versus 31.1%) and residential care (2.5% versus 3.3%).
Good predictive factors in case of long-term housekeeping assistance appeared to be the experience with either home help or informal care on housekeeping activities. Those who experienced care from a home help organisation are more inclined to choose home help compared to those who did not. Experience with informal care leads to an increased tendency to prefer informal assistance. These elderly also favour residential care.
Of the individual characteristics, gender, socio-economic status and the level of well-being have a high predictive value. Men, and those with a low occupation status, are more in favour of informal support and residential care. Those with a low level of well-being have a stronger preference for home help/home care and residential care as those with higher levels.
The age of the elderly is particularly associated with the tendency to choose residential care; the greater the age, the greater the preference for residential care. The elderly with a partner prefer home help/home care, just as those living in adapted housing. These last respondents are also more in favour of residential care. In case of a limited education or good mental health the elderly tend to choose for informal support. Strong social support is the social factor associated with a higher preference for care from informal carers. Although we did not expect a direct relationship between the actual need for care of the elderly and their preferences, such a relationship did exist. Need predicts a tendency to choose home help/home care services.

Predicting Choices: Long-Term Personal Care
In case of long-term personal care, much of the same predictive factors are found (Table 3.4.). Prior experience with home help/home care services is shown to predict a stronger tendency to choose for home help/home care. Previous experience with informal care is associated with a preference for informal support. The main individual predictive variables are also gender, socio-economic status and well-being.
As in the previous situation, men, and those with a low occupation status, show an increased preference for informal support and residential care. A low level of well-being is associated with an increased tendency to choose for home help/home care services or residential care.

Table 3.4. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term personal care.

	Informal home care	Home help/care services	Residential care
reference person	27.5	67.6	4.9
Experience with receiving care			
home help (housekeeping)	11.8	84.1	4.1
informal care (housekeeping)	40.3	54.6	5.1
Individual characteristics			
men	33.3	58.9	7.8
age = 65 yrs	26.3	70.5	3.2
age = 85 yrs	28.5	64.2	7.3
living with a partner	26.3	71.1	2.6
living with other(s)	32.9	63.1	4.0
adapted housing	21.1	70.6	8.3
low occupation status	31.4	61.9	6.7
low level of well-being	21.0	70.7	8.3
feelings of depression	29.1	63.9	7.0
feelings of anxiety	27.2	69.5	3.3
neuroticism	23.2	70.6	6.2

Definition of the reference person: a woman aged 75 years, living without a partner in a regular house, has a high level of occupational status and a high level of well-being, does not suffer from feelings of depression, anxiety or neuroticism and has no experience with home help/home care organisations or informal support for housekeeping or personal care

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 6614, df = 8250, p = 1.00

Again, increasing age is found to be related to a stronger tendency to choose for residential care. Those who live with a partner tend to prefer home help/home care. Living in an adapted house is related to a stronger tendency to choose either home help/home care services or residential care. Finally, the elderly who suffer from neuroticism or anxiety show a higher preference for home help/home care. Neuroticism and feelings of depression are associated with an increased preference for residential care.

3.4 Discussion

The results of this study underline the trend reported by others (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990); the preference for informal support declines when the expected duration of care becomes extended and/or involves personal care rather than housekeeping assistance. Whereas almost 50% of the respondents would prefer help from children for short-term housekeeping, only slightly more than a quarter prefers this kind of support when long-term personal care is needed. If the respondents would be in need of long-term personal care over 60% prefer the help from home care services and nearly 10% would apply for residential care. This shift in preference might be attributed to a desire to not rely too heavily on informal helpers. This seems to be even more true where non-family informal helpers are concerned. Although earlier research found the attitudes of elderly people towards filial obligation to be unclear (Brody, Johnsen and Fulcomer, 1984), our data suggest a clear statement: elderly genuinely prefer professional help in situations which imply an intensive and lasting care commitment.

Since many attributes of the respondents influence their preferences, the preference pattern will be sensitive to the sample that is surveyed. Due to the specifics of the Dutch primary health care system, there is no reason to assume differences between the patients of GP's and the total Dutch population. With the Health Insurance Act ensuring that the health care costs of individuals and families with an income below a fixed level are covered, and private health care insurance being extended to all higher income households, over 95% of the Dutch have their 'own' GP. Furthermore, the Dutch tend to be rather loyal to their GP and do not change their primary physician unless there is a compelling reason to do so such as when they move to another city.

In this study, of the initial 5834 patients selected by GP's, data on only 2991 (51.3%) persons were at our disposal for analysis. Almost ten percent of the attrition is the result of survey related issues, such as the exclusion of cognitive impaired elderly and incomplete telephone interviews. The remaining attrition of 40% is not unusual in Dutch surveys since elderly people in the Netherlands are frequently approached to participate in interviews. However, this attrition carries the danger of selection bias. Neither the selection of GP's or their patients nor the comparison of the ultimate population with the total Dutch population are reason to assume such selective bias to exist in this study. Although we do not expect a selective attrition, this phenomenon can not totally be ruled out either. Selective attrition might have occurred due to a higher refusal rate of less healthy elderly. In that case the results of our study do not represent the most impaired community residents.

Our findings confirm the strong predictive value of the experience with home help/home care services or informal care on the selection of care arrangements. Due to the cross-sectional design of this study, an over-representation of those who previously had a preference for these types of care, and therefore applied for it, cannot be excluded.

However, since we asked the 'experienced' respondents to freely choose the person/service of their first preference, the findings suggest the induction or stabilisation of a positive attitude and even a preference for these types of care. Thus, being subjected to informal helpers or the personnel from home care/home help organisations seems no reason for older persons to alter their preferences.

Closely related to this issue is the dynamic of 'induced demand': if services are readily available, people are more likely to have used them, and consequently, to prefer them. The increased preference for public services must be understood against a background of increased availability of public help on the one hand, and to the societal attitudes and expectations that there should not be too much reliance on informal care. Arguably, the more publicly-funded services are available and generally used, the more it is likely to appear to disabled elders and their helpers that heavy reliance on informal carers is an imposition, a burden. Thus, the more home help/home care is provided, the more this is likely to create attitudes in favour of, and preferences and demand for, home help/home care services by both elderly people and their network members.

Gender, age, socio-economic status and level of well-being appeared to be the best additional predictive factors. The effect of socio-economic status and well-being on the selection of care arrangements has been reported elsewhere (McAuley and Blieszner, 1985). Greater age appeared to be especially related to the preference for residential care. Particularly in regard to long-term care the findings indicate that the elderly who are 'frail' tend to favour professional home care, whereas the 'stronger' ones more often prefer informal home care. Thus, a low level of well-being, poor mental health, less social support, living in adapted housing and having disabilities were positively related to a preference for home help/home care services. The socio-economic status of the elderly is an exception to this rule, in that a higher education level and a higher occupation status are associated with a preference for home help/home care services.

When long-term housekeeping assistance is needed, the preference for informal and residential care seem related. Apparently, the 'stronger' elderly consider themselves capable of arranging informal care at home. A larger percentage of those who doubt this ability among the 'strong' persons focus on residential care, possibly to avoid the stage of professional home care. Nonetheless, the selection of residential care is not fully clear from our analysis, but it might be explained as an enlargement of the concept that 'frail' elderly are more likely to choose home help/home care services; when long-term personal care is needed, the 'frail' older persons tend to prefer residential care instead of home care.

The need for care was assessed on the basis of four hypothetical care-need situations in which the respondents were asked to project themselves. Nevertheless, discrepancies between the actual need for care of the respondent and some or all of these situations are likely. We therefore checked the relationship between the actual need for care of the respondents and their preferences. The multivariate analyses showed a significant direct relationship between the need for care and the selection of care arrangements when long-

term housekeeping assistance is needed. The strong correlation between previous experience with care and the preference for the various types of care might explain these results; this relationship covers almost the whole of the effect of the need for care on the selection of care arrangements, but a small direct association continues to exist. In the long-term housekeeping care situation this association becomes evident.
Some limitations of this study concern the assessment of the experience with care; previous experience with informal and professional home care should be assessed for the preceding several years. Furthermore, additional factors which might also influence the preferences of older persons may be considered. For example, the general attitudes of the elderly towards receiving informal and/or professional support. Moreover, the influence of network members on the choices of the elderly is a well-known phenomenon (Allen, Hogg and Peace, 1992; Pratt et al., 1989).

Finally, we would restate the relevance of research on the selection of care among older people to those contemplating the future of long-term care for the elderly. Our findings suggest that the younger and 'stronger' elderly state a higher preference for informal care in case they would need assistance. In contrast, the older and 'frail' elderly are more likely to choose home help/home care services care at first and, in more severe circumstances, apply for residential care. Planning future care arrangements for the elderly should seek to accommodate these observed differences. What should be taken into account though, are the above mentioned effects of 'induced demand' and the changing societal attitudes towards filial obligation etc. Government funding might encourage the preference and, therefore, the demand for public services which policy-makers must respond to by providing still greater access to public help.
The cross-sectional design of this study does not allow us to attribute our findings to either a cohort effect or shifting preferences in case of becoming older and impaired. Health care planning would benefit from an understanding of whether the younger elderly will continue to favour informal support when they grow older and become disabled or whether they would change their preference in favour of home help/home care services and residential care. Longitudinal research could make a decisive contribution to decision-making on which type of care should by emphasised in the long term.

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Appendix

Table 3.A. Characteristics of the study population and operational definitions of the independent variables (N=2991).

Variable	Definition	%
Experience with receiving care		
home help (housekeeping)	1 = home help at the time of the interview, or the previous year	12.2
home care (personal care)	1 = home care at the time of the interview or the previous year	3.2
informal care (housekeeping)	1 = informal housekeeping care at the time of the interview	35.6
informal care (personal care)	1 = informal personal care at the time of the interview	11.5
Individual characteristics		
age (years)	continuous (multivariate analyses)	
	0 = 65 - 74 (univariate analyses)	60.2
	1 = 75+	39.8
gender	1 = female	58.8
household composition	0 = living alone	36.8
	1 = living with partner	55.7
	2 = living with other(s)	7.5
housing	0 = regular house	81.3
	1 = adapted housing (e.g. sheltered housing)	18.7
education level	0 = only primary education	42.4
	1 = also advanced education	57.6
income	0 = only a state pension	38.9
	1 = other income above the state pension	61.1
occupational status	0 = low occupation status; low prestige production - high prestige service	43.9
	1 = high occupation status; high prestige production - high prestige professionals	56.1
Need for care		
need for care (IADL)[a]	1 = much need for IADL care	57.0
need for care (ADL)[a]	1 = much need for ADL care	47.6

[a] Respondents were requested to answer a series of questions relating to the variable and responses were scored. The sum of the scores for the variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups

4

Care Preferences of Elderly Community Residents: The Relationship with Attitudes towards Care[1]

Summary

This study examined the attitudes of independently living elderly aged 65 and over towards informal and professional care on the basis of an eight-item scale 'receptivity towards informal support'. Further, the relationship between these attitudes and the preferences for care arrangements in various (hypothetical) care-need situations differing in type of care needed and the expected duration, is investigated. Beyond the previous experience with receiving care, and individual and social characteristics of the elderly, the attitudes towards care showed themselves to be a strong predictor of the care preferences of older people. The authorities might use the attitude towards care as a steering instrument for altering the elderly's preferences for and use of services in the long term.

4.1 Introduction

Decisions about care arrangements for the elderly are determined by a complex set of interacting personal and environmental factors (McAuley and Blieszner, 1985). The importance of individual values and attitudes towards care decision-making has been emphasised by several authors (Kane and Kane, 1982; McAuley and Blieszner, 1985; McCullough et al., 1993). Psychological theories on choice behaviour support the idea that values and attitudes significantly affect decision-making (Ajzen and Fishbein, 1980; Rotter, 1975). Attitudes influence decision-making by controlling the information allowed to deliberation (Sims, Boland and O'Neill, 1992).

[1] Based on Wielink, G. and R. Huijsman. Care preferences of elderly community residents in the Netherlands: the relationship with attitudes towards care. (submitted for publication).

The influence of attitudes on the use of services, the most frequently assessed outcome measurement of the care decision-making process, has been demonstrated in a few studies (Deimling and Poulshock, 1985; Wister, 1992). Lately, the achievement to adapt health care services to accommodate the wishes of the elderly has made the preferences of older adults more important as an outcome measurement of care decision-making (Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986). The actual options preferred are receiving more attention in planning when compared to traditional 'revealed preferences' obtained by extrapolation of the use of services. Although Brody and colleagues presented the results of a study on the attitudes of elderly women towards informal and professional care on the one hand (Brody et al., 1983) and preferences of this same population for these types of care on the other hand (Brody, Johnsen and Fulcomer, 1984), assessment of the relationship between attitudes towards and preferences for care has not been reported until now.
Based on a Consumer Behaviour Model, a conceptual model of preference development has been proposed (Figure 4.1.; Engel, Blackwell and Miniard, 1986). The model describes not only the consecutive steps of preference development but also the influence of individual and social characteristics, previous experience with receiving care, and the attitudes towards receiving care on this development. The model shows a direct relationship between the attitudes towards receiving care and the preferences for care.

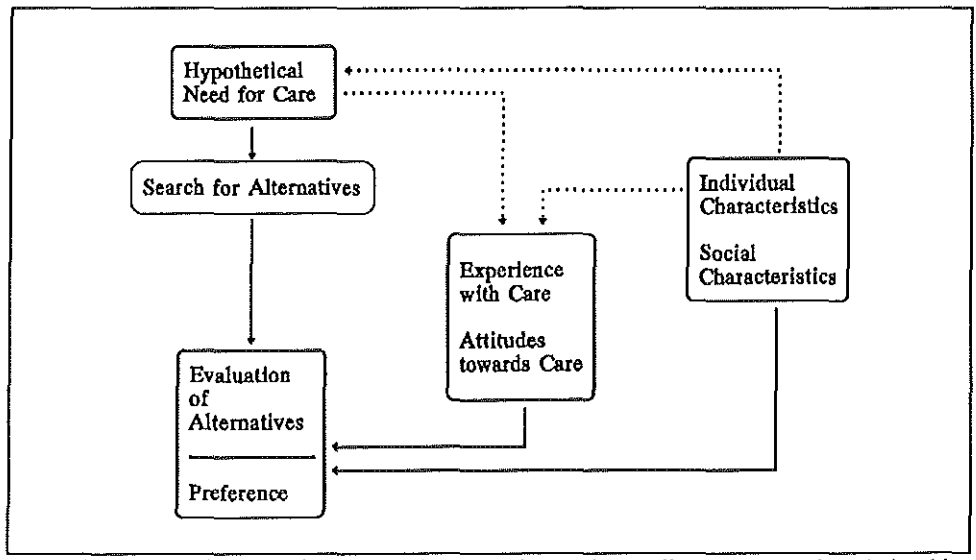

Figure 4.1. The model of preference development; the continuous lines represent the relationships addressed in this study.

A study amongst independently living elderly of 65 years and over was undertaken to verify the conceptual model. The research reported here focuses on the attitudes towards receiving informal and professional care. In addition, the relationship between attitudes and preferences for care is investigated. Furthermore, the effect of all the influencing factors, including the attitudes, on the preference development is assessed.

Attitudes

In this study the attitudes represent a generalised attitude towards receiving support. This attitude generalises during time from one particular situation and provider of services to a series of situations and providers which the individual experiences as similar situations/-service providers. Research indicates that the elderly's attitude towards services is far from uniform. It would appear that many do not have a positive picture of the services available to them (Krout, 1983). Brody and colleagues (1983) developed a subscale to measure receptivity to professional support. This scale consists of nine items concerning autonomy, filial obligation, financing and availability, in relation to professional and informal care. In general, older people were quite receptive to professional support, but they also had high expectations of informal support.

Whether the autonomy of the elderly is endangered more by informal or professional caregiving is an unsettled issue. From the literature on autonomy and independence it appears that most elderly want to live self-sufficiently into their later years (Collopy, 1988; McCullough et al., 1993; Wahl, 1991). However, less is known about individual attitudes towards dependency on professional or informal care. Some of the elderly seem to feel most dependent when receiving informal care, while others have more trouble with receiving professional care, and a third group dislikes dependency on both professional and informal carers (Krout, 1983; Stoller, 1985).

Filial obligation, the obligation of adult children to care for their frail elderly parents or parents-in-law, is an issue that has been given much attention in research (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990; McCullough et al., 1993; Wolfson et al., 1993). The increased percentage of the elderly currently using professional services is sometimes explained by a weakening of family solidarity and a shifting of responsibility from families to government (Daatland, 1990; McCullough et al., 1993). Even so, attitudes of the elderly towards filial obligation remain unclear; on the one hand, there is evidence that the ideology of familial responsibility persists among the elderly, while, on the other hand, they do not wish to be a burden to their children (Brody, Johnsen and Fulcomer, 1984). Therefore, older people might become more receptive to professional care when they expect to be a heavier burden.

Even less is known about the attitude of elderly people towards another subject of Brody's subscale, the availability of care. The Dutch National Health Care Council defined availability as a part of one of the three concepts of the quality of care, namely the carer's technical performance (e.g., swathing a patient), the attitude of the helper (e.g., a friendly treatment of the patient), and the organisation of the care (e.g., continuity of care). Dutch research indicated an increase in the prospect of older adults living in their

own homes for as long as possible if guaranteed professional help whenever they need it (De Klerk and Huijsman, 1989).
Similarly, little research has been done to assess the attitude of the elderly towards the financial aspects of care. Sixty-five percent of the elderly in Brody's research population would rather pay a professional than ask for assistance from family or friends (Brody et al., 1983). Most elderly people in the Netherlands are prepared to pay for the care they need, but most also state that they only have a small margin with which to meet such payments (Pijnenburg, 1993).
The data reported in this study represent a step toward identifying the attitudes of elderly community residents for various aspects of informal and professional care.

Preferences
The preference for care is the most favourable supplier of care in a single person's view. It represents the most preferred outcome of an individual evaluation of all possible alternatives. The care preferences are used to describe what others have called 'intention to use' care services. Earlier research demonstrated that the elderly's preferences for care depend largely on the type of care that is required and the expected duration of that care (Daatland, 1990; McAuley and Blieszner, 1985; Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997). In case of short-term housekeeping assistance, about 50% of the Dutch elderly prefer the care of professional services. This percentage increases when personal care and/or long-term care is needed; 80% of the Dutch elderly choose professional above informal care in cases where they need long-term personal care.
However, care preferences were found to be influenced by individual, social and experiential indicators (Wielink, Huijsman and McDonnell, 1997). Previous experience with either informal care or help from home help/home care organisations increased the likelihood that that type of care would be preferred. Particularly in regard to long-term care the 'frail' elderly tend to favour home help/home care services, whereas the 'stronger' ones more often prefer informal care. Thus, for example, a low level of well-being, poor mental health, less social support, living in adapted housing and having disabilities, were found to be positively related to a preference for professional home care.

The purpose of the present study is to examine the attitudes of the elderly towards informal and professional care. Therefore, ten attitude statements are framed representing the domains of autonomy, filial obligation, finances, and the quality concepts of availability and the attitude or treatment of the elderly's helpers. Secondly, the relationship between the attitudes of the elderly and their preferences in four hypothetical care-need situations (differing in type of care needed and expected duration) will be investigated. Finally, analysis of all influencing factors on preference development will be established by means of multivariate analyses.

4.2 Methodology

Data were gathered as part of a larger study on the effects of psychosocial factors on functional status and the use of supportive and institutional care (Ormel et al., 1992).

The Research Population
General practitioners (GP's) from 12 medical practices in the northern region of the Netherlands selected all their patients who had attained the age of 65 years on January 1st 1993 (N=5834). In 1993 and early 1994 these people were approached for a face-to-face interview in their own home. Of the elderly approached, 2359 declined participation, 56 interviews were incomplete due to cognitive impairments of the respondents and 218 elderly were only interviewed briefly by telephone due to lack of research funds. After being interviewed, the respondents were handed out a questionnaire to be completed and returned to the researchers by mail; of these 142 did not respond. In addition, data on 68 respondents resident in an old-people's home were excluded as we were only interested in those living independently. Therefore, the analyses presented here are based on 2991 elderly persons living independently.
The mean age of the study group was 74.1 years (range 65-94). A majority (58.8%) of the respondents was female. Most respondents (55.7%) lived with a partner, 7.5% lived (also) with others and 36.8% lived alone.
Comparison of some basic characteristics of the research participants with the total Dutch population (65+) showed an almost equal percentage of males. Respondents aged 70 to 79 were somewhat overrepresented in the research population compared to the total Dutch population (37.0% versus 33.9%). In contrast, respondents aged 80 to 89 were a little underrepresented among the participants (12.9% versus 17.0%).

Operationalisation of Variables
Need for care: The need for care is defined by means of four hypothetical care-need situations: the need for short-term housekeeping assistance, long-term housekeeping assistance, short-term personal care, and long-term personal care. To establish a short period for which the respondents would seriously consider informal care, we set four weeks as the dividing line between short-term and long-term care.
Alternatives: The basic assumption was that Dutch elderly are familiar with the regular care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991). The respondent could choose one from the following answers: home care by children, neighbours/friends/acquaintances, private services, or home help/home care organisations, residential care or co-residence with family.
Preferences: The respondents were asked to imagine themselves in the four hypothetical care-need situations and to state the most preferred person or organisation from whom to receive care in each situation. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations.

Attitudes: Ten attitude statements representing the domains of autonomy, filial obligation, finances, and the quality concepts availability and the attitude/treatment of the elderly's helpers in relation to receiving informal or professional support, were administered to the respondents (Table 4.1.). The statements were aimed to scale the attitude of the respondents towards informal support on the one hand and professional care on the other hand. The various statements all related to important aspects of informal and/or professional care. The items were suggested and reviewed for face value by project investigators. Responses were measured on a 5-point Likert scale (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree).

A principal components analysis was performed to determine whether one major attitudinal dimensions would be found. The components analysis resulted in one component with a value greater than 1.35, accounting for 36% of the total variance. All variables showed a loading of at least 0.50 on this component, except for two items. Whether or not the variables comprise a scale was determined by computing the internal consistency by means of Cronbach's alpha. The reliability coefficient of a scale containing all ten items was 0.68. Removing the same two items that did not load very high on the above mentioned component, increased Cronbach's alpha to 0.73.

Based on these results we scaled the remaining eight items to the scale 'receptivity towards informal support'.

Experience with care: Registered were whether the respondents received informal care at the time of the interview (no information was available on the period before the interview), and whether the respondents were receiving care from home help/home care organisations at the time of the interview or during the previous year. We distinguished between assistance with housekeeping activities and personal care.

Individual characteristics: The following characteristics were assessed: age, gender, household composition, living situation, level of education, level of income, (former) occupational status (based on the Treimcmp index; Treiman, 1977), well-being (assessing physical and social well-being, e.g., loneliness and safety), mental health (based on the MOS short-form general health survey; Stewart, Hays and Ware, 1988), satisfaction with life in general (Kempen and Ormel, 1992), feelings of depression and anxiety (based on the hospital anxiety and depression scale; Zigmond and Snaith, 1983), and personality characteristics: neuroticism and extraversion (based on the revised Eysenck personality questionnaire; Eysenck, Eysenck and Barrett, 1985).

Social characteristics: The following characteristics were assessed: the size of the network of the respondents, social functioning (Stewart, Hays and Ware, 1988) and the extent of receiving social support (Van Eijk, Kempen and Van Sonderen, 1994).

Actual need for care: In order to investigate the influence of the actual need for care of the respondents on the selection of care arrangements, this need was assessed by the need for support with activities of daily living (ADL) and instrumental activities of daily living (IADL; Kempen and Suurmeijer, 1990).

Data Analyses
Relative frequency distributions of the attitude item responses were calculated; the combined percentages of those who agreed and strongly agreed are presented here. A chi-square test was used to examine the univariate relationship between the dependent (the preference) and the independent variable (the attitude) in the various care-need situations. Backward stepwise logistic regression analysis for polytomous dependent variables (having more than 2 categories) was used to explore which of the independent variables explain and predict the preferences of the elderly. Since we expected independent relationships between all these variables and the preferences, the backward procedure was chosen. This way the first model includes all the independent variables and subsequently eliminates those variables that deliver no significant contribution to the model.
In order to simplify the interpretation of the results of the logistic regression analysis we checked all independent variables to determine the ability to dichotomise them. Except for the age and the attitude of the elderly which were continuous variables, all independent variables were dichotomised. The operational definitions of the independent variables are given in the appendix. Information on the psychological individual characteristics and the social indicators is missing in this table, however. Regarding these characteristics the respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of the scores for each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups.
In the logistic-regression model we distinguished only professional and informal home care and residential care; co-residence with family was left out of consideration because of the small number preferring this type of care. Both the help from children and neighbours, friends and acquaintances and the help from private services and home help/care were grouped so as to constitute informal and professional care respectively.

4.3 Results

Attitudes
Table 4.1. presents the most important findings on the scale 'receptivity to informal support' and the other two items. The first column shows the correlation between the items and the composite score, obtained by summing the standard item scores for all high-loaded (0.30 or higher) items in the scale. The percentages of the respondents who (strongly) agree with the statements are displayed in the next column. The average score of the respondents on the scale is 21.1 (range 8-40). A low score represents a high receptivity to informal support and low reliance on professional help. The cut-off point to determine which respondents were in the 'high receptivity' group and which were in the 'low receptivity' group was set in the middle of the scale, at a score of 24.

Table 4.1. The item total correlation and the percentage agreement with the ten attitude statements.

	Item total correlation	% Agreement
Autonomy		
° It is annoying to have to depend on professional care [a]	0.39	63.4
° Help from professional organisations involves a loss of autonomy [a]	0.50	52.7
° Help from informal carers involves a loss of autonomy	-	60.3
Filial obligation		
° When older people need temporary care, they should be able to ask their children, family or neighbours for assistance [a]	0.43	61.8
° When the elderly need housekeeping assistance, they should be able ask their children, family or neighbours for help [a]	0.53	37.3
° When the elderly need personal care, they should be able to call upon their children, family or neighbours for assistance [a]	0.51	26.8
Financing		
° The elderly should not have to pay for the care they need [a]	0.34	57.4
Availability		
° You must wait too long before receiving help from professional organisations [a]	0.32	55.4
Treatment		
° Professional carers patronise the elderly too much [a]	0.36	37.6
° When your children help you, they also begin to patronise you	-	44.0

[a] items of the scale 'receptivity towards informal support', Cronbach's $\alpha = 0.73$

In view of the responses on the items that criticise dependency on costs, availability and treatment of professional help, a slight majority of the respondents seem, at first, more receptive to informal than professional care; over 50% of them agree with these statements. An exception is the statement on professional carers patronizing the elderly as only 37.6% of the respondents agree with this statement. However, looking at the responses to the items on informal care it becomes clear that the respondents are even less positive on dependency and treatment aspects of informal support.
Regarding the items on the responsibility of informal carers for older people, the expected theoretical tendency can be observed empirically. The heavier the burden, the more respondents do not expect informal carers to take responsibility for it. Only 26.8% of the respondents agree on informal care in case of personal care, whereas over 60% agree on informal care when temporary care is needed.

Attitudes in Relation to Preferences
The preferences of the respondents in four hypothetical care-need situations are shown in Table 4.2. On the basis of their score on the attitude scale, respondents were almost equally divided over two groups: one group with a high and one group with a low receptivity to informal support. Although the trend in the responses is quite equal in each group, the percentages show considerable differences. The percentage of the respondents choosing for help from children is the highest in case short-term housekeeping is needed and decreases as the expected duration of care becomes longer and/or concerns personal care. In the latter situations the preference for professional services rises.
In the group with a high receptivity to informal support the preference for help from children is almost 60% when short-term housekeeping is needed and decreases to 39.2% when long-term personal care is needed. In the other group the preference for assistance from children is, even in the short-term care situation, smaller (34.0%). This figure decreases also considerably and is only 14.7% when long-term personal care is needed.
The percentage of the respondents choosing professional services in the group with a high receptivity to informal support is, in each situation, much smaller than in the other group. The groups do not differ considerably on the percentages with a preference for other informal support and co-residence with family members, although the percentages preferring these types of care are higher in the 'high receptivity' group. A low receptivity to informal support seems to be related to a higher preference for private services, and residential care is also more often chosen by these respondents.
The differences between the two groups are significant in all four care-need situations with a very small p-value ($p < 0.001$).

Preference Development Model
Results presented in Table 4.3. highlight the relationship between three long-term care choices and the different characteristics of individuals when compared with a given reference person (see definition in Table 4.3.).

Table 4.2. Preferences in four hypothetical care-need situations for respondents with a high or low 'receptivity to informal support' (percentages).

	Housekeeping activities		Personal care	
	short-term	long-term	short-term	long-term
N	2873	2839	2877	2808
High receptivity to informal support				
children	58.2	49.5	44.2	39.2
neighbours/friends/acquaintances	8.2	-	3.7	-
private services	14.6	-	-	-
home help services	19.0	44.4	-	-
home care services	-	-	52.1	52.9
residential care	-	5.6	-	7.3
co-residence with family	-	0.5	-	0.6
Low receptivity to informal support				
children	34.0	22.8	20.4	14.7
neighbours/friends/acquaintances	6.4	-	1.9	-
private services	24.7	-	-	-
home help services	34.9	69.6	-	-
home care services	-	-	77.7	75.2
residential care	-	7.1	-	9.8
co-residence with family	-	0.5	-	0.3

- no possible answer

This reference person represents a 'common denominator' respondent. Thus, compared to the reference person (who did not experience help from home help/home care organisations), respondents who experienced help from home help/home care organisations are far more likely to choose home help/home care services (80.2% versus 64.2%) at the expense of their choice for informal home care (17.6% versus 32.6%) and residential care (2.2% versus 3.2%).

Both prior experience in receiving care and the attitude towards receiving care are strongly related to the preferences of the respondents when long-term housekeeping assistance is needed. On the one hand, experience with home help services or a low receptivity towards informal support are strong predictors of a preference for home help/home care services. On the other hand, respondents who experienced informal housekeeping assistance or have a high receptivity towards informal support are much more in favour of informal care.

Table 4.3. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term housekeeping assistance.

	Informal home care	Home help/care services	Residential care
reference person	32.6	64.2	3.2
Experience with receiving care			
home help (housekeeping)	17.6	80.2	2.2
informal care (housekeeping)	41.7	53.2	5.1
Attitude; receptivity towards informal support			
high receptivity	62.8	35.0	2.2
low receptivity	12.1	84.5	3.4
Individual characteristics			
men	39.5	55.0	5.5
age = 65	35.1	62.8	2.1
age = 85	30.0	65.1	4.9
living with a partner	30.3	68.3	1.4
living with other(s)	39.8	56.6	3.6
adapted housing	29.5	65.0	5.5
low occupation status	33.5	61.4	5.1
low level of well-being	28.4	64.8	6.8
good mental health	39.2	57.7	3.1
Social characteristics			
strong social support	38.6	58.7	2.7

Definition of the reference person: a women aged 75 years, living without a partner in a regular house, has a high level of occupational status, a high level of well-being and poor mental health, receives little social support, has no experience with home help/home care organisations or informal support for housekeeping or personal care and has an average receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 6022, df = 8086, p = 1.00

Table 4.4. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term personal care.

	Informal home care	Home help/care services	Residential care
reference person	29.6	60.4	10.0
Experience with receiving care			
home help (housekeeping)	15.7	75.4	8.9
informal care (housekeeping)	40.6	48.7	10.6
Attitude; receptivity towards informal support			
high receptivity	62.2	31.5	6.2
low receptivity	9.7	79.2	11.3
Individual characteristics			
men	31.9	53.8	14.3
age = 65 yrs	31.0	62.3	6.7
age = 85 yrs	27.7	57.4	14.8
living with a partner	28.9	65.6	5.5
living with other(s)	36.4	53.3	10.3
adapted housing	23.4	59.6	17.0
low level of well-being	24.9	60.5	14.6
high satisfaction	32.0	61.7	6.3
feelings of anxiety	21.7	65.3	12.9
neuroticism	30.2	63.2	6.6

Definition of the reference person: a woman aged 75 years, living without a partner in a regular house, has a high level of occupational status and a high level of well-being, a poor satisfaction with life, does not suffer from feelings of depression, anxiety or neuroticism, has no experience with home help/home care organisations or informal support for housekeeping or personal care and has an average receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 5944, df = 8008, p = 1.00

The basic characteristics of the respondents (age, gender, household composition and living situation) are also associated with the choices they make. Men and those living with other(s) are more in favour of informal and residential care.
Greater age and living in an adapted house are found to be related to a preference for home help/home care services and residential care. A limited occupational status is

particularly related to a preference for residential care. Respondents with a low level of well-being are more in favour of home help/home care services and residential care. Those with good mental health or strong social support tend to choose informal care.
In case of long-term personal care, the experience with care and the attitude towards care are also found to be good predictive factors (Table 4.4.). Experience with, or a positive attitude towards, informal care are related to a higher preference for this type of care. The opposite preferences apply for experience with home help/home care services or a negative attitude toward informal care.
In this situation the same basic characteristics as in the housekeeping situation, together with the level of well-being and neuroticism, are the most predictive other factors. Men and those living with others appear to be more in favour of informal and residential care. Greater age, living in an adapted house, a low level of well-being and feelings of anxiety are found to be related to a higher preference for residential care at the cost of informal care. Those with a high satisfaction with life tend to choose informal care.

4.4 Discussion

The results of this study confirm important elements of the conceptual model upon which it is based; attitudes towards care, experience with care and individual and social characteristics of older people are related to their preferences for various care arrangements. Although the relationship between attitudes towards informal and professional care and the preferences for care arrangements might not seem surprising, it is an important finding for several reasons. Firstly, our data confirm a theoretical hypothesis that has not been studied before. Secondly, the use of multivariate analysis showed that the preferences of older people can be predicted by a series of influencing factors, of which the attitude towards receiving care is a strong one. Thirdly, assuming that steering preferences for, and thus indirectly the use of, care services for the elderly is useful, the attitudes of older people towards informal and professional care could be a fine steering instrument. Before we elaborate on this final topic we would like to make some comments on our findings.
In this study respondents were ranked according to their receptivity to informal support; responses on critical statements on various aspects of professional care were combined with the opinion on the obligation of informal helpers to support their relatives. A small majority of the respondents show a rather negative attitude towards professional care; over 50% agree on the censorious statements on dependency, availability and costs of professional care. However, the respondents appear to be even less positive on items about dependency on and treatment of informal carers. So, from the perspective of living self-sufficiently, neither receiving informal or professional care probably attracts older people.

The findings of the univariate analysis indicate a strong relationship between the attitudes towards informal and professional support and the preferences of the elderly for care arrangements. In fact, a very sharp partition between professional and informal care could be observed; a high receptivity to informal support tends towards a greater preference for care of children, neighbours, friends, acquaintances and co-residence with family. Respondents with low receptivity more often chose for home help/home care, residential care, and also the help of private services.

Multivariate analysis was used to determine the independence of the relationship between the attitudes and the preferences of the elderly, and to identify the strength of this relationship in comparison with the other influencing factors. Like in previous studies (Wielink, De Klerk, and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997), the prior experience in receiving care was found to be a strong predictor of the preferences of older people. And once again the basic characteristics of older people (age, gender, level of well-being and others) were found to be associated with their preferences. In this study, however, the attitude of the elderly toward receiving care was shown to be an even stronger predictor of the preferences for care arrangements than the influencing factors studied earlier. So, the attitude of older people toward informal and professional care strongly adds to the prediction of the preferences for care.

Since many attributes of the respondents influence their preferences, the preference pattern will be sensitive to the sample that is surveyed. Due to the specifics of the Dutch primary health care system there is no reason to assume differences between the patients of GP's and the total Dutch population. With the Health Insurance Act ensuring that the health care costs of individuals and families with an income below a fixed level are covered, and private health care insurance being extended to all higher income households, over 95% of the Dutch have their 'own' GP. Furthermore, Dutch persons tend to be rather loyal to their GP and do not change their primary physician unless there is a compelling reason to do such as when they move to another city.

In this study, of the initial 5834 patients selected by GP's, data on only 2991 (51.3%) persons were at our disposal for analysis. Almost ten percent of the attrition is the result of survey related issues, such as the exclusion of cognitive impaired elderly and incomplete telephone interviews. The remaining attrition of 40% is not unusual in Dutch surveys since elderly people in the Netherlands are frequently approached to participate in interviews. However, this attrition carries the danger of selection bias. Neither the selection of GP's or their patients nor the comparison of the ultimate population with the total Dutch population are reason to assume such selective bias to exist in this study. Although we do not expect a selective attrition, this phenomenon can not totally be ruled out either. Selective attrition might have occurred due to a higher refusal rate of less healthy elderly. In that case the results of our study do not represent the most impaired community residents.

Finally, we want to restate the relevance of this study by emphasising the role the attitude can play in altering the preferences of elderly people. The elderly's preferences for care reflect the future use of services. So, information on the care preferences of older adults will be useful in the planning of health care services. This information might be used in various phases of health care planning, for example in determining an individual service package that is 'made-to-measure' or in the planning of health care services in the medium range based on expected shortcomings. When an increase in the preference for a particular kind of care is observed, it might trigger the government to start stimulating this kind of support. However, whenever the elderly's preferences for care show an undesired trend one might start searching for a way to change these preferences. Our findings indicated the substantial impact of individual, social, and experiential factors on the preference development, but an even more important contribution came from the attitudinal influences. In addition the attitude towards receiving care also seems to be the most impression-bound factor. Although it will not be easy to change the attitude of elderly people, the authorities might find the attempt worthwhile in order to steer the preferences for, and the use of, services in a desired direction. Although the determination of the desirability of such a development is beyond the scope of this discussion, we continue with an example in order to illustrate our reasoning for suggesting the above.

For reasons of integration and participation in society, but also for financial reasons, the Dutch authorities have been stimulating home care and attempted to de-institutionalise the elderly over the last two decades. Home care was planned to be provided by professionals, but home care organisations were also encouraged to involve informal carers in the care for the elderly. Although the percentages of disabled older people receiving informal care is quite high (see the introduction), this figure has not increased over the last twenty years.

Research on the preferences of the elderly for various care arrangements showed a high percentage of older people preferring professional services instead of informal support, particularly when they would need long-term personal care (Wielink, De Klerk, Huijsman, 1995; Wielink, Huisman and McDonnell, 1997). Therefore, a serious attempt by the authorities to stimulate informal home care in the future may emphasise an alteration of the care preferences of older adults. The attitudes of the elderly towards informal and professional support might be a fine instrument in altering these preferences. Modifying public opinion on informal support in a positive manner will probably change the preferences of the elderly in favour of informal supports, and might increase the willingness of informal carers to also provide care. Of course, changing public opinion is neither an easy task, nor one that can be accomplished in the short term.

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Appendix

Table 4.A. Characteristics of the study population and operational definitions of the independent variables (N=2991).

Variable	Definition	%
Experience with receiving care		
home help (housekeeping)	1 = home help at the time of the interview, or the previous year	12.2
home care (personal care)	1 = home care at the time of the interview or the previous year	3.2
informal care (housekeeping)	1 = informal housekeeping care at the time of the interview	35.6
informal care (personal care)	1 = informal personal care at the time of the interview	11.5
Attitudes		
receptivity towards	continuous (multivariate analyses)	
informal support	1 = high receptivity	52.4
Individual characteristics		
age (years)	continuous (multivariate analyses)	
	0 = 65 - 74 (univariate analyses)	60.2
	1 = 75+	39.8
gender	1 = female	58.8
household composition	0 = living alone	36.8
	1 = living with partner	55.7
	2 = living with other(s)	7.5
housing	0 = regular house	81.3
	1 = adapted housing (e.g. sheltered housing)	18.7
education level	0 = only primary education	42.4
	1 = also advanced education	57.6
income	0 = only a state pension	38.9
	1 = other income above the state pension	61.1
occupational status	0 = low occupation status; low prestige production - high prestige service	43.9
	1 = high occupation status; high prestige production - high prestige professionals	56.1
Need for care		
need for care (IADL)[a]	1 = much need for IADL care	57.0
need for care (ADL)[a]	1 = much need for ADL care	47.6

[a] Respondents were requested to answer a series of questions relating to the variable and responses were scored. The sum of the scores for the variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups

5

Elderly Community Resident's Preferences for Care: The Results of a One-Year Follow-up Study[1]

Summary

This study describes the preference development for care of 458 moderately disabled elderly persons aged 65 years and over during a one-year follow-up. We requested the respondents to state the most preferred provider of services in two (hypothetical) care-need situations. By means of multivariate analyses, the effect of static and dynamic individual, social, experiential and attitudinal indicators on preference development is examined. The findings indicate a shift in preference towards professional home care and residential care during the follow-up period. This shift is largely attributed to a decrease in their receptivity towards informal support. In order to steer the care preferences (care use) of the elderly, an understanding of the preference development is indispensable.

5.1 Introduction

The importance of preference and freedom of choice of frail, older people on long-term care decisions is being increasingly acknowledged by professionals contemplating the future of care for the elderly (Allen, Hogg and Peace, 1992; Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986; Rubinstein, Kilbride and Nagy, 1992). The actual options preferred are receiving more and more attention in planning when compared to traditional 'revealed preferences' obtained by extrapolation of the use of services. However, empirical evidence to support this trend is lagging behind, and only a few studies on care preferences of older people are available (Brody, Johnsen and Fulcomer, 1984; Daatland, 1990; McAuley and Blieszner, 1985).

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[1] Based on Wielink, G. and R. Huijsman. Elderly community resident's preferences for care: the results of a one-year follow-up study. (submitted for publication).

Based on a Consumer Behaviour Model, a conceptual model of preference development has been proposed (Figure 5.1.; Engel, Blackwell and Miniard, 1986; Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997). Preferences are determined by requesting the respondents to state the most preferred provider of services in (hypothetical) care-need situations. The model describes not only the consecutive steps of the development of preferences, but also the influence of individual and social characteristics, previous experience of receiving care and the attitudes towards receiving care.
The model was first verified using the cross-sectional data of the Groningen Longitudinal Ageing Study (Ormel et al., 1992; Wielink, Huijsman and McDonnell, 1997; Wielink and Huijsman, submitted[a]). A one-year follow-up of the group of functionally disabled elderly people who participated in the original Groningen study has enabled us to both demonstrate the development of preferences over time and further verify the model. The elderly respondents of our study were purposely selected because of their functional disablements. These people were expected to be actively engaged in the decision-making process on care.

The purpose of the present study is to describe the preference development of functionally disabled elderly people during a follow-up period of one year. Furthermore, the influence of individual, social, experiential and attitudinal indicators on this development will be examined by means of multivariate analyses.

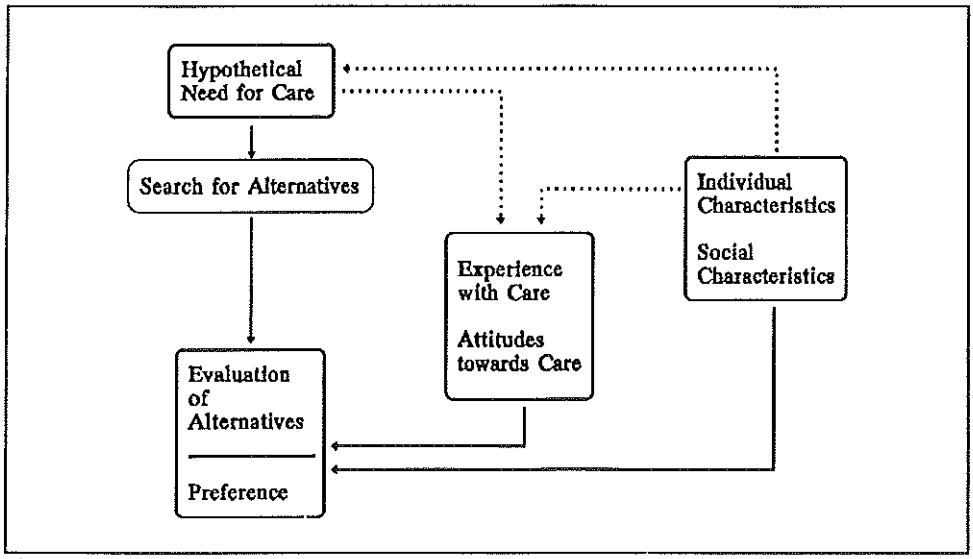

Figure 5.1. The model of preference development; the continuous lines represent the relationships addressed in this study.

5.2 Methodology

Data were gathered as part of a larger study on the effects of psychosocial factors on functional status and the use of supportive and institutional care (Ormel et al., 1992).

The Research Population
General practitioners (GP's) from 12 medical practices in the northern region of the Netherlands selected all their patients who had attained the age of 65 on January 1st 1993 (N=5834). In 1993 and early 1994 these people were approached for a face-to-face interview in their own home. Of the elderly approached, 2359 declined participation, 56 interviews were incomplete due to cognitive impairment of the respondents and 218 elderly persons were only interviewed briefly by telephone due to lack of research funds. After being interviewed, the respondents were handed out a questionnaire to be completed and returned to the researchers by mail; of these 142 did not respond. In addition, data on 68 respondents resident in an old-people's home were excluded as we were only interested in those living independently.
Of the total sample that was interviewed (N=2991) we selected respondents with four or more functional disabilities (N=704) for a second interview approximately one year later. Participation was refused by 113 respondents and, due to organisational failures, 133 respondents did not receive questions on their preferences for care. Therefore, the analysis presented here is based on 458 elderly people with a moderate functional disability.
The mean age of the study group was 75.0 years (range 66-95) at the second interview. A majority (77.7%) of the respondents was female. Most respondents (50.7%) lived alone, 42.1% lived with a partner and 7.2% (also) lived with others. A further description of the study group is given in the appendix.
During the one year follow-up the percentage of the respondents that received informal support declined, whereas the percentage receiving professional housekeeping assistance increased. Among the respondents the receptivity towards informal support highly declined during the year. Furthermore, the respondents became less satisfied with life, more depressed and increasingly fearful. Finally, the performance of both the activities of daily living (ADL) and the instrumental activities of daily living (IADL) became worse during the year.

Operationalisation of Variables
Need for care: The need for care is defined by means of two hypothetical care-need situations: the need for long-term housekeeping assistance, and the need for long-term personal care. We set four weeks as the dividing line between short-term and long-term care.
Alternatives: The basic assumption was that Dutch elderly are familiar with the regular care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991;). The

respondent could choose one from the following answers: home care by children, home help/home care organisations, residential care or co-residence with family.

Preferences: The respondents were asked to imagine themselves in the two hypothetical care-need situations and then to state the person or organisation they most preferred to receive care from in each situation. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations.

Attitudes: Ten attitude statements representing the domains of autonomy, filial obligation, finances, and the quality concepts availability and the attitude/treatment of the elderly's helpers in relation to receiving informal and professional support, were administered to the respondents. The statements were aimed to scale the attitude of the respondents towards informal support on the one hand and professional care on the other hand. The various statements all related to important aspects of informal and/or professional care. The items were suggested and reviewed for face value by project investigators. Responses were measured on a 5-point Likert scale (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree).

A principal components analysis was performed to determine whether one major attitudinal dimensions would be found. The components analysis resulted in one component with a value greater than 1.35, accounting for 36% of the total variance. All variables showed a loading of at least 0.50 on this component, except for two items. Whether or not the variables comprise a scale was determined by computing the internal consistency by means of Cronbach's alpha. The reliability coefficient of a scale containing all ten items was 0.68. Removing the same two items that did not load very high on the above mentioned component, increased Cronbach's alpha to 0.73.

Bases on these results we scaled the remaining eight items to the scale 'receptivity toward informal support'.

Experience with care: We registered whether the respondents were receiving home help/home care services or informal care at the time of the interview (no information was available on the period before the interview). A distinction was made between assistance with housekeeping activities and personal care.

Individual characteristics: The following characteristics were assessed: age, gender, household composition, level of education, level of income, (former) occupational status (based on the Treimcmp index; Treiman, 1977), mental health (based on the MOS short-form general health survey; Stewart, Hays and Ware, 1988), satisfaction with life in general (Kempen and Ormel, 1992), feelings of depression and anxiety (based on the hospital anxiety and depression scale; Zigmond and Snaith, 1983).

Social characteristics: The following characteristic was assessed: the extent of receiving social support (Van Eijk, Kempen and Van Sonderen, 1994).

Actual need for care: In order to investigate the influence of the actual need for care of the respondents on the selection of care arrangements, this need was assessed by the need for support with activities of daily living (ADL) and instrumental activities of daily living (IADL; Kempen and Suurmeijer, 1990).

Data Analyses

Relative frequency distributions of the preferences during the primary and follow-up assessment were calculated. In the analyses we only distinguished professional and informal home care and residential care; co-residence with family was left out of consideration because of the small number preferring this type of care (less than 1%).

Backward stepwise logistic regression analysis for polytomous dependent variables (having more than 2 categories) was used to explore which of the independent variables explain and predict the preferences of the elderly. Since we expected independent relationships between all these variables and the preferences, the backward procedure was chosen. This way the first model includes all the independent variables and subsequently eliminates those variables that deliver no significant contribution to the model.

Since nine possible preference outcomes could be distinguished (see Table 5.1. and 5.2.), the analyses were performed on subgroup level based on the preferences of the basic assessment. However, the group that chose residential care during the basic assessment was too small to analyze.

During the analyses, all dynamic independent variables were trichotomised; one category for those who improved, one for those who remained stable, and one for those who deteriorated. Exceptions were the indicators of experience with care and household composition. The experience indicators were dichotomised: 'previous experience with care' and 'no experience with care'. The household composition was dichotomised too: 'living alone' and 'living with others'. The operational definitions of the independent variables are given in the appendix. Regarding the psychological individual and the social characteristics the respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of the scores for each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups. All independent variables were included in the multivariate analyses, but only the significant contributions will be reported.

5.3 Results

Preferences

Table 5.1. presents the preferences for long-term housekeeping assistance at the time of the basic assessment and the follow-up interview. Overall, the preference for professional home care and residential care increased at the expense of informal home care. Of the respondents who preferred informal home care during the basic assessment, over 50% had now changed their mind. They mainly modified their preference in favour of home help services.

Table 5.1. Preferences regarding long-term housekeeping assistance during the basic and the follow-up assessment; numbers and (percentages).

Follow-up assessment	Informal home care	Home help services	Residential care	Total
Basic assessment				
Informal home care	64	64	8	136 (30.6)
Home help services	37	219	22	278 (62.6)
Residential care	3	15	12	30 (6.8)
Total	104 (23.4)	298 (67.1)	42 (9.5)	444 (100)

About one quarter of the respondents who preferred home help services at the time of the first interview shifted their preference in favour of informal home care or residential care. More than half of those preferring residential care during the basic assessment chose professional or informal home care during the second assessment.

Table 5.2. Preferences regarding long-term personal care during the basic and the follow-up assessment; numbers and (percentages).

Follow-up assessment	Informal home care	Home care services	Residential care	Total
Basic assessment				
Informal home care	35	55	9	99 (22.6)
Home care services	22	246	28	296 (67.6)
Residential care	6	20	17	43 (9.8)
Total	63 (14.4)	321 (73.3)	54 (12.3)	438 (100)

Regarding the preference for long-term personal care, the overall results show the same tendency (Table 5.2.): During the one-year follow-up the preference for professional and residential care increased, thus the preference for informal care decreased.

When compared to the earlier situation, more of the respondents who had, at first, chosen informal care now changed their minds, and less respondents who had chosen home care services in the first instance now altered their choice.

Table 5.3. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term housekeeping assistance.

	Informal home care	Home help/care services	Residential care
First assessment: informal home care			
reference person	37.0	56.4	6.6
Experience with receiving care			
no home help/care services	63.9	33.8	2.3
no informal care	17.5	66.2	16.3
Attitude; receptivity towards informal support			
less receptivity	16.0	66.2	17.8
First assessment: professional home care			
reference person	15.0	80.3	4.7
Individual characteristics			
low occupation status	8.7	81.6	9.7

Definition of the reference person: an older person that has a high level of occupational status, has experience with informal support and help from home help/home care organisations for housekeeping or personal care and a stable or higher receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 642, df = 802, p = 1.00

The Preference Development Model

Results presented in Table 5.3. highlight the relationship between three long-term care choices and the different characteristics of individuals when compared with a given reference person (see definition in Table 5.3.). This reference person represents a 'common denominator' respondent.

Table 5.4. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term personal care.

	Informal home care	Home help/care services	Residential care
First assessment: informal home care			
reference person	48.5	48.4	3.1
Attitude; receptivity towards informal support			
less receptivity	16.7	70.2	13.1
Individual characteristics			
more satisfaction	47.1	49.6	3.3
First assessment: professional home care			
reference person	7.4	85.8	6.8
Attitude; receptivity towards informal support			
less receptivity	3.3	82.2	14.5

Definition of the reference person: an older person that has a lower or stable satisfaction with life and a stable or higher receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit chi-square = 583, df = 716, p = 1.00

Two groups of respondents were distinguished: those who stated a preference for informal home care at the time of the basic interview, and those who then stated a preference for professional home care.

Housekeeping assistance: Of the respondents who preferred informal home care in the first instance, those who only experienced professional home care, or whose receptivity towards informal support decreased, tended to shift their choice more often in favour of home help/home care services or residential care (Table 5.3.). On the contrary, respondents who had only experienced informal care more often retained a preference for informal home care.

The former occupational status was the only characteristic that significantly affected preference development of those preferring professional home care at the time of the first assessment: those with lower occupational status changed their minds more often in favour of residential care or retained a preference for home help/home care services.
Personal care: Respondents showing an earlier preference for informal home care who became less satisfied with life, or whose receptivity towards informal support decreased, more often developed a preference for professional home care and, for those whose receptivity diminished, for residential care (Table 5.4.). The increase in the preference for residential care also applied to those with an earlier preference for home help/home care services whose receptivity towards informal support had reduced.

5.4 Discussion

In general, our findings show a shift in preference of moderately disabled elderly towards professional home care and residential care during the one year follow-up. Table 5.1. and 5.2. make clear that this shift is due primarily to those respondents who at first preferred informal home care changing their minds in favour of professional home or residential care during the one-year follow-up period. The preferences of those who had earlier preferred home help/home care services were much more stable. Both long-term care situations showed the same trends, although the trend towards professional home care and residential care is stronger when personal care is needed. Based on the cross-sectional data, it was assumed that frail elderly people would tend to favour professional home care and residential care above informal care (Wielink, Huijsman and McDonnell, 1997; Wielink and Huijsman, submitted[a]). The results of this study support this assumption, and even indicate a strengthening of this effect over time.
The assessment of factors influencing the development of the preferences demonstrates the importance of the role played by attitudes towards informal and professional care. A decrease in receptivity towards informal support is most probably the main reason for the shifting preferences of the respondents. Experience with informal and/or professional home care, former occupational status and degree of life satisfaction were also found to affect preference development. The influence of the 'static' variables: previous experience (static because there were almost no modifications) and occupational status were also evident in earlier research (Wielink, De Klerk and Huijsman, 1995, Wielink, Huijsman and McDonnell, 1997). The change in satisfaction with life only marginally contributed to the shift in preference. That other correlations failed to materialise can probably be firstly attributed to the small size of the study and, secondly, to minor changes in individual characteristics and experience indicators during the one-year follow-up study.
In discussing the results of this study, we would also note some methodological issues. Due to the specifics of the Dutch primary health care system there is no reason to assume that differences exist between the patients of GP's and the Dutch population as a whole.

The Health Insurance Act ensuring that health care costs are covered for all individuals and families with an income below a certain level, and private health care insurance covering the high income households, means that over 95% of the Dutch have their 'own' GP. Moreover, the Dutch are rather loyal to their GP and do not change their primary physician unless there is a compelling reason to do so, such as moving to another city.
Furthermore, of the initial 704 elderly people with a moderate functional disability who were selected from the total research population, data on only 458 (65.0%) were at our disposal for analysis. Half of this decrease is the result of organisational failures. There is no reason to assume selection bias here. Respondents declining to participate in the second interview explains the other half of the decrease, although here there may be some selection bias. A deterioration in health status could be an important motive for not wishing to participate in the second interview. That the percentage of people in need of ADL/IADL care increased may perhaps give some clues to this assumption. In that case our results do not represent severely disabled elderly.

In conclusion, we will both summarise the results of this study and indicate some implications they have for the care for the elderly. In their choice of care arrangements, moderately disabled, older community residents tend to favour professional home care and residential care in the first instance. During our follow-up a year later, the percentage of respondents favouring professional home or residential care even increased. The results of the multivariate analyses show that attitudes towards informal and professional care are the most important factors in explaining a shift in preferences over time.
These findings may indicate the following pattern of development. Under the influence of 'weakening' factors - functional disability, mental health problems or loss of social support - preferences shift primarily towards professional home care, with some shift towards residential care. Meanwhile, attitudes towards informal and professional home care and residential care bring about a preference shift towards professional home and residential care. Yet this process continues, even when the effect of the 'weakening' factors has ceased, and would indicate the major influence of attitudes on preference development among the disabled elderly over a one year period.
In order to steer the care preferences (care use) of the elderly towards, for example, cheaper alternatives or arrangements offering better quality, an understanding of preference development is indispensable. Research in this field should focus on the preference development of those who become frail and those who continue to be frail. Our results once again emphasise the importance of attitudes towards informal and professional care as a steering mechanism in the decision-making process on care (Wielink and Huijsman, submitted[a]).

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Appendix

Table 5.A. Characteristics of the study population and operational definitions of the independent variables (N=458).

Variable	Definition	Basic Ass.(%)	Follow-up Ass.(%)
Experience with receiving care			
home help (housekeeping)	1 = home help services at the time of the interview	24.5	28.2
home care (personal care)	1 = home care services at the time of the interview	5.1	4.6
informal care	1 = informal care at the time of the interview	66.4	57.0
Attitudes			
receptivity towards informal support	1 = high receptivity	50.9	36.5
Individual characteristics			
age (years)	continuous (multivariate analyses)		
	1 = 60 - 69	29.8	-
	2 = 70 - 79	48.7	-
	3 = 80+	21.5	-
gender	1 = female	77.7	-
household composition	0 = living alone	49.1	50.7
	1 = living with partner	43.9	42.1
	2 = living with other(s)	7.0	7.2
educational level	0 = only primary education	46.2	-
	1 = also advanced education	53.8	-
income	0 = only a state pension	42.9	-
	1 = other income above the state pension	57.1	-
occupational status	0 = low occupational status; low prestige production - high prestige service	42.6	-
	1 = high occupational status; high prestige production - high prestige professionals	57.4	-
satisfaction with life[a]	1 = less satisfaction with life	49.7	63.7
mental health[a]	1 = poor mental health	52.1	49.0
feelings of depression[a]	1 = many feelings of depression	47.9	65.0
feelings of fear[a]	1 = many feelings of fear	41.0	53.7
Need for care			
need for care (IADL)[a]	1 = much need for IADL care	51.1	57.0
need for care (ADL)[a]	1 = much need for ADL care	52.4	58.7

[a] Respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of the scores for each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups

6

Elderly Community Resident's Evaluative Criteria in Long-Term Care Decision-Making[1]

Summary

This study focuses on the evaluative criteria of elderly community residents of 60 years and over regarding their preferences in two (hypothetical) situations of long-term care decision-making. An overall picture of the evaluative criteria which the elderly use to evaluate various alternatives for long-term care is assessed. Furthermore, we determined which of these evaluative criteria may be considered as the most important by the elderly. A good relationship with informal carers appears almost pre-conditional to a preference for informal support. The desire not to burden acquaintances, as well as a positive previous experience with this type of care, are the most important reasons stated for choosing professional services. Insight into criteria that are used to evaluate different care arrangements might clarify and refine our perspective on future developments.

6.1 Introduction

The desirability of 'choice' among users of care services is being increasingly emphasised in numerous European countries and the USA (Allen, Hogg and Peace, 1992; Barney, 1977; Gelwicks and Dwight, 1982). Elderly people must be able to choose where they live and what services they receive. As a consequence of this view, the Dutch Government has recently introduced a personal attendance allowance, an amount of money allocated to indigent persons to cover expenditures resulting from the need for care (Beleidsbrief persoonsgebonden budgetfinanciering, 1995). The indication of a long-term

[1] Based on Wielink, G. and R. Huijsman. Elderly community resident's evaluative criteria in long-term care decision-making. (submitted for publication).

need for assistance will entitle the recipients to spend the allowance according to their own judgement on, for example, informal support or professional services.
Although the objective of this reform is to encourage family and other informal service networks, evidence confirming such effect is not available. In fact, as in most other countries, only limited information is available in the Netherlands on the preferences of the elderly for various care arrangements (Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986; Eustis, Kane and Fisher, 1993). Furthermore, little research has been done on the criteria used by older people in determining their preferences. The central question here is whether the introduction of this personal attendance allowance will cause the elderly to 'employ' members of their network now they are able to remunerate them, or whether they will prefer the assistance of professionals for reasons such as their expertise or because they would rather not burden their relatives.
The planning of future long-term care facilities for the elderly would benefit from an understanding of the care preferences of indigent older people. Moreover, insight into criteria that are used to evaluate the various options may clarify and refine our perspective on future developments. In this report we present the results of an exploratory study on the preferences for care arrangements and the evaluative criteria that the elderly use to decide between the various alternatives.
Since the selection of care arrangements is of particular interest for the indigent elderly, we only selected those with a particular need for care. They should be actively engaged with the subject and may have already considered the important consequences of the various types of services available. In this regard, the differences between acute care and long-term care decision-making must be noted (McCullough et al., 1993). Acute care typically involves well-defined and temporary assistance. Long-term care has been defined as 'a range of services that address the health, personal care, and social needs of individuals who lack some capacity for self-care' (Kane and Kane, 1982). Imagine the variance in circumstances between, for instance, an active elderly person who has broken a hip during a fall and another who has struggled with disability for a number of years and who is losing the ability to manage on his own.

Preferences and Evaluative Criteria
Preferences for care largely depend on the type of care that is needed and on the expected duration of that care (Daatland, 1990; Wielink, De Klerk and Huijsman, 1995). The greater the extent of long-term or personal care, the more a preference is shown for professional care over informal support. The following characteristics of the elderly were also found to be related to an increased preference for professional care: a lower level of well-being, functional disabilities, poor mental health, weak social support and living alone (Wielink, Huijsman and McDonnell, 1997). This means that both the need for intensive care and a greater degree of disability lead to an increasing preference for professional care. In this study we focus on long-term care while drawing a distinction between housekeeping assistance and personal care.

Evaluative criteria are based on the standards and specifications used by the elderly in comparing various types of services. Until now findings on the criteria used to evaluate the various services have almost exclusively considered cases where the elderly are admitted to a nursing home or other group living facilities. Just one study reported the mapping of values in long-term care decision-making in a general context (McCullough et al., 1993). Moreover, it is difficult to synthesise the research already conducted since each has employed different approaches. Some considered the reasons for entering or applying to enter an institution (Cohen et al., 1988; Kraus et al., 1976), while others examined the attitude of older persons towards various aspects of long-term care services, including the quality of care, the costs of using a facility or aspects of privacy (Biedenharn and Bastlin Normoyle, 1991; Brennan, Moos and Lemke, 1989). McCullough and his colleagues used a qualitative approach to identify the general values that the elderly report as being relevant to the process of long-term care decision-making. The most important values mentioned were to live in a pleasant environment and to preserve self-identity.

The first purpose of the present study is to identify the spectrum of evaluative criteria that older people use in determining their preferences for long-term care arrangements. Secondly, we wish to discover which of these criteria are considered the most important.

6.2 Methodology

Strategy and Inclusion Criteria
To elaborate on the research questions two different strategies were employed. Because of the exploratory character of this study, a qualitative approach was used to identify the scope of evaluative criteria used by older people to distinguish between various care services. A quantitative approach was used to determine which of these criteria the elderly judged as being the most important.
The qualitative and quantitative research samples were generated using the following inclusion criteria: research subjects had to be 60 years or above, had to live without a partner and possessed communication skills adequate to participate in an interview.

Qualitative Sample
A purposive sampling strategy was used to identify older indigent people who would start receiving assistance at short notice due to their reduced capacity for self-care. We therefore selected patients of a general hospital who had (mainly) managed on their own before their admission and who would need (extra) help for at least four weeks after their discharge. The nursing staff of three hospital departments (orthopaedics, surgery and neurology) cooperated in our research and referred potential subjects who appeared to

satisfy the inclusion criteria. After nine potential individuals were identified, eight agreed to be interviewed with only one older woman refusing participation.
The characteristics of the interviewees are reported in the appendix. All except one were female and their mean age was 80 years (range 69-95). Most of the respondents were widowed and had low levels of education and income. All except one had received some informal, home help or private housekeeping assistance prior to admission. Only one respondent then received personal care.

Quantitative Sample
The selection of the quantitative sample was also based on a purposive sampling strategy. To assess the preferences and important evaluative criteria of older people with both an acute and a long-term need for care, both types were included. The acute care sample was selected using the same procedure as the qualitative sample. The nursing staff of the hospital identified seventeen individuals satisfying the inclusion criteria and all of them participated in an interview.
Elderly people with a need for long-term care were identified partly by the staff of a senior citizen centre for the community-based elderly, and partly from an existing research sample of older people living independently. The first group were selected on both their ability to (mainly) manage on their own and on the expectation that they would need (extra) support at short notice. The second group had participated in earlier research and their selection was based on a moderate to high extent of disability. The staff of the senior citizens centre identified twenty individuals who satisfied the inclusion criteria. One of the twenty refused participation. We approached participants of the earlier research until we were able to arrange an interview with forty-one persons. For reasons unknown to us, one was unable to participate. The characteristics of the respondents of both groups are presented in the appendix. In both groups a large majority of the elderly was female and widowed. The mean age was 79 (range 72-94) for the respondents of the acute care group and 78 (range 60-91) for the chronic care respondents. Regarding the current long-term care setting, the table shows that most respondents received some kind of housekeeping assistance. A small number of respondents had also received personal care.

Qualitative Methods
A topic list was developed to both standardise the interview process and to provide questions useful in probing for additional information. All interviews took place in August 1994 and were tape recorded. The interview comprised a series of questions designed to elicit, in addition to demographic information, a description of the care situation before hospital admission and their preferences in two hypothetical case situations: long-term housekeeping assistance and long-term personal care. In addition, evaluative criteria reported by the respondents themselves and which they found relevant in choosing the long-term care alternatives they had considered was noted. Those who already received long-term housekeeping and/or personal care were asked to imagine they could make a

new and free choice. Interviews were conducted in the hospital and lasted an average of sixty minutes. After each interview, the researcher read the typed transcript and corrected any inconsistencies using the tape recording of the interview.

Quantitative Methods

Structured interviews were conducted at the end of 1994. We operationalised the various variables as follows:

Preferences: The respondents were asked to imagine themselves in two hypothetical care-need situations: long-term housekeeping assistance and long-term personal care. Then they were asked to state the most preferred person or organisation from whom to receive care in each situation. In addition, respondents were told to ignore any external hindrances such as financial or organisational considerations. Those who already received long-term housekeeping and/or personal care were asked to imagine they could make a new and free choice. The respondents could choose one from the following answers: home care by children, other relatives, neighbours, friends/acquaintances, private services, home help/home care organisations, residential care or co-residence with family. Respondents also had the opportunity to add an additional alternative.

Evaluative criteria: After the respondents stated their preference, they were asked to motivate their choice on a free format basis. This question was intended as an introduction of the concept of evaluation criteria to the respondents. An instrument utilising a forced-choice format (administered by card sort) was then used to measure the importance of various evaluative criteria by recording the ranking of fifteen potential criteria (see Table 6.1.). We distinguished nine evaluative criteria in favour of informal support and six in favour of professional services. The evaluative criteria were extracted from the results of the qualitative research. Whenever the respondent mentioned an evaluative criterium which did not match one of the criteria on the cards, it was also registered.

Test-Retest Reliability

Two weeks after the first assessment the respondents of the quantitative research were interviewed for a second time using exactly the same questions on preferences and evaluative criteria. In view of the quickly changing circumstances of those in an acute care situation, the respondents recruited in the general hospital were not included in the test-retest assessment.

Regarding the selection and ranking of evaluative criteria, two different methods were used. The first method was based on the concept of selecting as much criteria as were found relevant and ranking them in order of their importance. In the second method only two - the most important - criteria could be selected. The first method was used with thirty-nine respondents of whom thirty-four (87.2%) participated in a second interview. The other twenty respondents used the second method of evaluative criteria selection. The response rate of this group in the second assessment was relatively low with only fourteen (70%) participants in the second interview.

Identical preferences for long-term housekeeping were found with forty-three respondents during both assessments, with their answers being divided over five alternatives. The percentage agreement between both assessments was 90, and Cohen's kappa 0.85 (0.73-0.97). On preferences for long-term personal care, the number of matching responses was also forty-three, divided over six alternatives. In this case the percentage agreement between both assessments was 90, and Cohen's kappa 0.82 (0.68-0.96). The agreement between the selected evaluative criteria during both assessments was 42% using the first method, while the agreement was much higher (68%) using the second method. Cohen's kappa was not calculated for the selection of evaluative criteria because of the high number of alternatives (N=15) and because of the unbalanced distribution of these alternatives.

6.3 Results

The spectrum of preferences and evaluative criteria will firstly be illustrated by the following two case studies.

Case 1
Mrs. L., a 69 year-old woman, lives alone in an apartment and has no children. Of her brothers and sisters (in-law), only two sisters are still alive, the rest of her siblings being deceased. They do not see each other very often as one of her sisters lives far away and the other struggles with disability. She has one good friend living in her neighbourhood and a few other acquaintances. Mrs. L. is able to manage her personal care, but receives professional help in the housekeeping.
Were she to need long-term housekeeping assistance or personal care, she would prefer the help of professional services. She is unable to think of other alternatives. "My two sisters are not able to help me, they are too old themselves. My nieces and nephews have their own lives and we do not have such a strong relationship anyway. My friend is 77, she cannot do it either. My neighbours tried to help me once when I had to go to the bathroom. They carried me. But they were too old and frail themselves, so all three of us fell over!"

Case 2
Mrs. N., a 82 year-old woman, lives alone in a senior citizen's apartment. She has one son whom she lost contact with a few years ago. She often meets her two granddaughters, who live nearby. Her only sister lives far away, but they visit each other regularly. She often meets with neighbours and other acquaintances. Until now she has not received housekeeping or personal care support.
She would prefer to receive long-term housekeeping assistance from her neighbours. "It is an automatic process, we have a tacit agreement to help each other whenever needed."

Table 6.1. Overview of the evaluative criteria stated in the qualitative research (N=8).

Evaluative criteria in favour of informal support:
I have a tight relationship with that person, I trust him/her
° I have a tight relationship with him/her
° I fully trust him/her
I prefer the help from my own relatives
° I prefer to get help from my own flesh and blood
I have good experiences with the support of this person
° I have always had their help and I appreciated it
We use to help each other
°It is an automatic process, we have a tacit agreement to help each other
In that case I receive help from the same person each time
° I heard that professional care implies different helpers all the time
In that case I don't have to depend on strangers
° I don't like to get help from someone I don't know
Helpers from home help/home care organisations don't do their job very well
° I heard the help from home help/home care organisations is disappointing
° They chat half of the time
° They drink too much coffee
° They don't do all jobs, 'I am no cleaning lady'
The help from professional organisations is expensive
° I cannot afford to have someone helping me
° I had to pay 8 guilders an hour then, nowadays it is even more expensive
You have to wait for a long time before professionals help you in the morning
° Sometimes I even had to wait until 11 before they came to wash me
° Most of the times they are late

Evaluative criteria in favour of professional support:
I doubt whether people I know would help me
° I cannot think of someone I know that would help me
° We do not have such a strong relationship
All the persons I know are too old to help me
° My neighbours would like to help me, but they are in their seventies too
° My friend is 77, so she cannot help me
° My sisters are old themselves
I do not want to burden people I know
° My children have their own life, their own families
° My children don't live nearby, I don't want to bother them
° I don't want to take advantage of the people I know
I have good experiences with help from professional organisations
° I have a fine relationship with my help
° The help from professional organisations is well-regulated
° I am very satisfied with the work they do for me
The helpers of professional organisations are experts
° The helpers of professional organisations are well-educated for their job
The helpers of professional organisations get paid for their work
° Only if you pay for assistance you can complain about it
° Paying for the services makes you feel less dependent

The cursive sentences represent the extracted evaluative criteria used in the quantitative research

Were she to need long-term personal care, she would also prefer assistance from her neighbours. "We would try it anyway, but it could become too heavy for them, they are in their seventies too. When it is too much of a burden, I would ask for professional services. But, you know, when they visit you on Monday they clean the windows, even when rain is forecasted for the next day."

Qualitative Research

The process of qualitative research resulted in a map which included all the evaluative criteria mentioned in selecting the preferred option for long-term care. Table 6.1. presents the criteria related to informal and professional services at home. The evaluative criteria are broad in scope, ranging from general ('we use to help each other') to quite specific criteria ('helpers from home help/home care organisations drink too much coffee').

The respondents stated twenty-nine different evaluative criteria, fifteen in favour of informal support or disfavouring professional services and fourteen in favour of professional services at home or disfavouring informal support. We translated these criteria into fifteen general criteria (the cursive sentences) which were utilised in the card sort during the quantitative research. This translation was carried out in two steps. Firstly, all the original criteria were clustered in groups with a similar meaning. Then a general statement covering all the included criteria was formulated. For example, all the evaluative criteria about the bad work that home help/home care organisations deliver were clustered together and a covering statement 'helpers from home help/home care organisations don't do their job very well' was formulated.

Quantitative Research

The preferences of the respondents in the acute and chronic care settings are presented in Table 6.2. For housekeeping assistance, more respondents in the acute care setting prefer informal support, particularly of their children or other relatives. Respondents in need of chronic care, on the contrary, more often choose home help or private services. The different preferences of the two groups were found significant using a chi-square test ($p<0.10$).

Where personal care is needed, an almost identical tendency may be observed. Those in an acute need for care more frequently prefer informal support, and the preference for home care services is much higher among those in the chronic care setting. The preferences for private services are, unlike the former situation, almost equal for the two groups.

One respondent preferred private residential care, which was not originally included as an option. The chi-square test did not demonstrate a significant difference between the preferences of the two groups.

Evaluative Criteria

Table 6.3. presents the evaluative criteria that were considered most important by both respondents in the acute care and in the chronic care situation. Separate data on these two groups are not shown because no particular differences were observed.

Table 6.2. Preferences of respondents in the acute care and the chronic care situation for long-term housekeeping and personal care; quantitative research.

	Acute care	Chronic care
Housekeeping assistance[*]		
N	17	59
children	6 (35.7)	14 (23.8)
other relatives	3 (17.3)	1 (1.7)
friends/acquaintances	-	1 (1.7)
home help services	4 (23.5)	25 (42.4)
private services	4 (23.5)	18 (30.4)
Personal care[**]		
N	16	56
children	5 (31.3)	8 (14.4)
other relatives	1 (6.2)	2 (3.5)
friends/acquaintances	-	1 (3.5)
home care services	9 (56.3)	38 (68.4)
private services	1 (6.2)	6 (8.4)
residential care	-	1 (1.8)

[*] $X^2=8.8$, $p=0.06$
[**] $X^2=4.1$, $p=0.67$

The evaluative criterium 'I prefer help from my own relatives' was the one most frequently stated by respondents who preferred informal support in case they would need housekeeping assistance. Another factor, that of a good relationship with informal helpers, was also stated as an important criterium in choosing this kind of support, whereas statements which criticised other types of services were chosen far less often as the most important reason for favouring informal support.

The most often stated evaluative criterium in favour of professional care was 'I do not want to burden the people I know'. Another statement, 'I have good experiences with this helper', was often made in favour of professional services. Among the criteria chosen by those who preferred another helper in case of the need for long-term personal care, one is noteworthy: 'professional helpers are experts'. This criterium is almost never mentioned where long-term housekeeping is needed, and is often stated as being important where long-term personal care is needed.

Finally, we will describe some additional evaluative criteria that were not included on the cards. Respondents with a preference for informal support mentioned the fact that they had little faith in the help of home help/home care organisations. The argument that one did not know where to turn to for help was a reason for choosing professional care. Another criteria for preferring professional services was the ease which not having to arrange things themselves afforded. Three motives for applying for private services were: 'as you pay for the help, you can order the jobs you want them to perform', 'private helpers deliver better services', and 'you can build a relationship with a helper you have chosen yourself'.

Table 6.3. The most important evaluative criteria respondents stated for their choices for long-term housekeeping and personal care.

	Housekeeping	Personal care[a]
In favour of informal support:		
prefer the help form own relatives	15(11.1)	3 (7.3)
tight relationship with helper	13 (9.6)	-
good experiences with this person	8 (5.9)	1 (2.4)
we use to help each other	6 (4.4)	2 (4.9)
the same helper each time	2 (1.5)	1 (2.4)
professional services are expensive	1 (0.7)	-
wait for long time for professionals	1 (0.7)	1 (2.4)
do not have to depend on strangers	1 (0.7)	2 (4.9)
In favour of professional support:		
do not want to burden people I know	46(34.1)	15(36.6)
good experiences with helper	27(20.0)	2 (4.9)
get paid for their work	9 (6.7)	4 (9.8)
others are too old to help me	2 (1.5)	-
professionals are experts	2 (1.5)	10(24.4)
I doubt whether people I know would help me	2 (1.5)	-

The total number of evaluative criteria stated by respondents per situation adds up to 100%

[a] Evaluative criteria in case of a need for long-term personal care were only selected by those respondents whose choice deviated from that in the housekeeping situation

6.4 Discussion

This report focuses on the evaluative criteria of elderly community residents with regard to their preferences in cases of long-term care decision-making. We firstly tried to get an overall picture of the evaluative criteria which older people use to evaluate different alternatives for long-term care. Then we assessed which of these criteria were considered most important by the elderly. The qualitative research elicited twenty-nine different criteria either in favour of informal support, or in favour of professional services. About half of the criteria in favour of both informal and professional services deal with the positive aspects of these types of care, such as a good relationship with helpers or the expertise of professionals. The other half, on the contrary, emphasise the negative aspects of the opposite type(s) of care with statements such as 'my neighbours are too old' or 'professional care is expensive'. Administering fifteen generalised evaluative criteria in the quantitative research illuminated some important aspects of long-term care decision-making. A good relationship with children, other relatives, friend or acquaintances appears an important pre-condition of a preference for informal support. The most frequently stated evaluative criteria in favour of informal care are all related to the relationship with these helpers.

The negative aspects of professional care as a reason for choosing informal support were found to be far less important criteria. In other words, only where a close relationship, good faith or good experiences with family and/or friends are present is a preference for these helpers expressed. However, in view of the fact that some of the elderly simply choose professional care because they do not wish to burden the people they know, this close relationship does not appear in itself to be a sufficient pre-condition. These particular elderly people may not want to risk damaging the relationship with their acquaintances by asking them for help.

With regard to a preference for professional services, the main motivation is bipartite. The wish not to burden acquaintances is the most stated evaluative criteria in favour of these types of care. Therefore, it is not the positive aspects of professional care, but the desire not to appeal to others which is the most important evaluative criteria in choosing professionals. These results may indicate that, for some of those who state a preference for professional care, the traditional care from children, other relatives etc. is still an attractive option, although the general attitude that women (who traditionally care for the elderly) should be able to live their own life, that is, participate in the labour market, cause the elderly to state that they do not wish to interfere in the lives of these people.

Positive previous experiences, on the other hand, are also often mentioned in support of professional services. Furthermore, the fact that professionals are remunerated for their services appears to be one reason for choosing these types of care. Therefore, the good experiences with professional care and the independence that accompanies paying your helper are two other important aspects of the preference for professional services. The expertise of professionals seems only important when personal care is needed. Where

housekeeping activities are concerned, the elderly may find expertise relatively unimportant. The attainment of specialised educational skills required for personal care, as laid down by the professional group itself, may also play a role.
The results of this study confirm the expected differences between acute care and chronic care decision-making (McAuley and Blieszner, 1985). Older people in an acute care setting show an increased tendency to choose informal support. The elderly with a chronic need for care more often prefer professional services. In view of the results of earlier research (Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997) which indicated that the more indigent elderly tended to be, the more they favoured professional care, it can be ascertained that a long-term presence of weakening characteristics, particularly functional disability, mental agitation and inadequate contact with, and support from, a network, increased the preference for professional care. With regard to the evaluative criteria that both groups indicated for their choices, we did not find significant differences.
In discussing the results of this study we cannot ignore some methodological limitations. The test-retest reliability of the assessment of the preferences is high in both situations (housekeeping and personal care). For the assessment of the evaluative criteria this reliability is not very high, particularly for the first method of assessment. The results showed considerably more agreement between the two assessments when we utilised the second method. These results imply that older people know their care preferences very well, but find it much harder to indicate the (most important) reasons for their choice. Despite the limited agreement of the evaluative criteria during both assessments using the first method, the overall results of both assessments (see Table 6.3.) show much similarity.
The older people interviewed in this study are not representative of all the elderly, nor the indigent elderly as a whole. The results of this study do, however, give insight into the preferences and underlying motives of the disabled elderly. An expansion of the present study to include a representative sample of the indigent elderly is recommended. Another possible improvement would be to enlarge the evaluative criteria to include, for example, criteria which express the differences between home help/home care and private services.

The current study shows a high preference for professional services among older indigent people in a chronic care setting. Although the introduction of a personal attendance allowance could stimulate the use of informal support, it remains unclear whether such a development will take place. The two most important reasons not to choose for informal support were the wish not to burden informal helpers and a previous good experience with professional services. Respondents with good experiences are not likely to change their preference because of the attendance allowance. Whether older people who do not want to depend on informal support think they can 'buy off' their independence by paying for the services of informal helpers is questionable.
With housekeeping assistance, about 30% of the chronicle disabled elderly chose for private services. The arguments for this choice, specifically mentioned at their own

initiative, clearly shows an appreciation of both a free choice of helper and the tasks they order this person to do. It seems possible that private services will flourish after the introduction of the personal attendance allowance, and not informal support. If private personal care services were to expand in the Netherlands, the demand for this type of care could increase concomitantly.

In conclusion it may be stated that the introduction of the attendance allowance will improve the freedom of choice of the indigent elderly. However, the results of this study also indicate that family and other informal service networks may not be encouraged or stimulated very much by this development. The implementation of this policy could probably best focus on the attitude of the residents of our country in general, and on the elderly and their potential informal helpers in particular.

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Appendix

Table 6.A. Characteristics of the respondents in the qualitative and the quantitative research.

	Qualitative	Quantitative	
		Acute care	Chronic care
N	8	17	59
Gender			
male	1 (12.5)	1 (5.9)	16 (27.1)
female	7 (87.5)	16 (94.1)	43 (72.9)
Age			
60-64	-	-	3 (5.1)
65-69	1 (12.5)	-	5 (8.5)
70-74	1 (12.5)	4 (23.5)	5 (8.5)
75-79	2 (25.0)	9 (52.9)	13 (22.0)
80-84	2 (25.0)	1 (5.9)	19 (32.2)
85-90	1 (12.5)	1 (5.9)	13 (22.0)
90+	1 (12.5)	2 (11.8)	1 (1.7)
Marital status			
widowed	5 (62.5)	13 (76.4)	51 (86.4)
married	1 (12.5)	1 (5.9)	-
divorced	1 (12.5)	1 (5.9)	5 (8.5)
single	1 (12.5)	2 (11.8)	3 (5.1)
Education level			
also advanced eduction	3 (37.5)	6 (35.3)	26 (44.1)
only primary eduction	5 (62.5)	10 (58.8)	33 (55.9)
missing		1 (5.9)	
Income			
high	1 (12.5)	5 (29.4)	15 (25.4)
low	7 (87.5)	6 (35.3)	36 (61.0)
missing		6 (35.3)	8 (13.6)
Current long-term care setting:			
housekeeping assistance			
mainly informal support	3 (37.5)	6 (35.3)	9 (15.3)
mainly home help services	3 (37.5)	5 (29.4)	24 (40.7)
mainly private services	1 (12.5)	4 (23.5)	20 (33.9)
personal care			
mainly informal support		2 (11.8)	1 (1.7)
mainly home care services	1 (12.5)	1 (5.9)	3 (5.1)
mainly private services		-	1 (1.7)

7

Elderly Community Resident's Preferences for Care: The Assembly of Evaluative Criteria and Determinants[1]

Summary

This study elaborates on the evaluative criteria on which care preferences are based and the determinants that influence these preferences. The ultimate objective is to describe and compare both in order to see whether they indicate substantial similarities. The attitudes towards receiving care, the previous experience with receiving care and a number of individual and social characteristics showed to be determinants of the care preferences of older people. The most often stated evaluative criteria were almost all related to parts of the integral attitude towards service suppliers or the experience with helpers. Efficient steering of the future health care planning for the elderly should be most efficient when not only the well-known influencing factors will be taken into account, but also the aspects the elderly themselves find important in determining their choice.

7.1 Introduction

In line with general policy, almost all elderly prefer to live in the community for as long as possible (Allen, Hogg and Peace, 1992; Houben, 1985; Rubinstein, Kilbride and Nagy, 1992). However, despite the view that older adults should have more input in formulating service packages, little research has been done to examine resident's preferences for support (Brennan, Moos and Lemke, 1989; Brown, Davey and Halladay, 1986; Eustis, Kane and Fisher, 1993). How to fit in the wishes of the elderly into future health care planning remains an unresolved issue (Steverink, 1996).

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[1] Based on Wielink, G. Elderly community resident's preferences for care: the assembly of evaluative criteria and determinants. (submitted for publication).

Elderly's care preferences are valuable for several reasons. First, future health care planning could benefit from an understanding of the wishes of potential users. Secondly, an adjusted policy to accommodate the care preferences of the elderly would enable to deliver care that is made-to-measure. Finally, attention for the wishes of the elderly could stimulate them to operate as 'active' consumer and participate fully in decisions made about their care (Allen, Hogg and Peace, 1992). Moreover, the process of realisation and the assessment of determinants have been shown important in clarifying and refining care preferences which may improve the establishment of the earlier mentioned targets (Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997).
Based on a Consumer Behaviour Model, a conceptual model of preference development has been proposed (Figure 7.1.; Engel, Blackwell and Miniard, 1986). The model describes the consecutive steps of the development of preferences; the recognition of a problem - the need for support -, the search for alternative solutions and the evaluation of the alternatives based on the evaluative criteria. Furthermore, important determinants of the care preferences are included in the model.

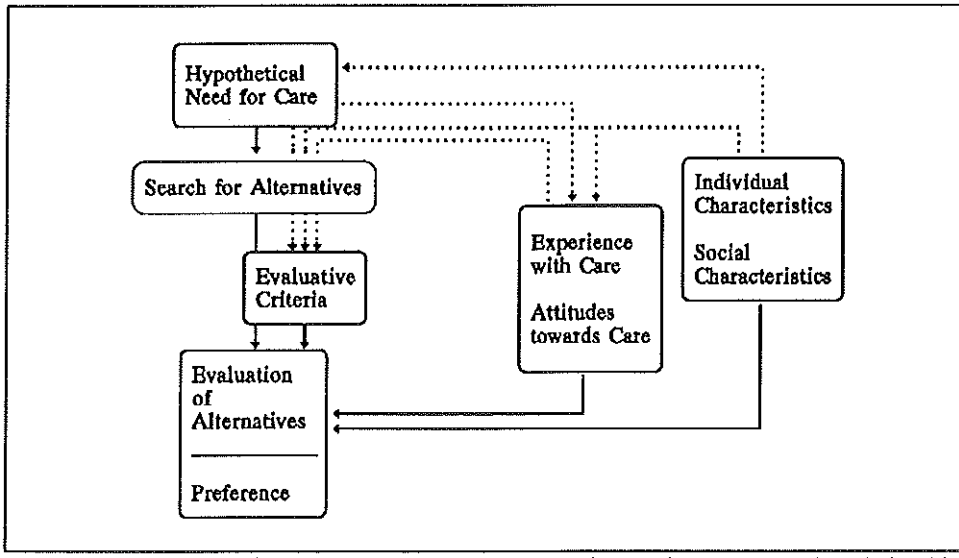

Figure 7.1. The model of preference development; the continuous lines represent the relationships addressed in this study.

The evaluative criteria form the foundation of the evaluation process, they are underlying the motives that the elderly themselves state to be the most important in determining their preferred option. In assessing these self-stated arguments a direct link between the evaluative criteria and the care preferences was made. Independently of the evaluative criteria information on a number of influencing factors was determined.

The following determinants were considered: individual and social characteristics of the respondents, their previous experience with receiving care and their attitudes towards receiving care.

The objective of the present study is to perform a descriptive analysis along two lines. On the one hand the evaluative criteria on which care preferences are based will be portrayed. The determinants that differentiate the preferences will be elaborated upon, on the other hand. Thereafter, we will compare both in order to see whether they indicate substantial similarities.

Preferences, Evaluative Criteria and Determinants

The preference for care is the most favourable supplier of care in a single person's view. It represents the most preferred outcome of an individual evaluation of all possible alternatives. The care preferences are used to describe what others have called 'intention to use' care services. Earlier research demonstrated that the elderly's preferences for care depend largely on the type of care that is required and on the expected duration of that care (Daatland, 1990; McAuley and Blieszner, 1985; Wielink, De Klerk and Huijsman, 1995). In case of short-term housekeeping assistance, about 50% of the Dutch elderly prefer the care of professional services. This percentage increases when personal care and/or long-term care is needed; 80% of the Dutch elderly choose professional above informal care in cases where they need long-term personal care.

However, care preferences were also found to be influenced by individual and social characteristics (Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997). Particularly in regard to long-term care the 'frail' elderly tend to favour the help from home help/home care organisations, whereas the 'stronger' ones more often prefer informal care. Thus, for example, a higher age, a low level of well-being, poor mental health, less social support, living in adapted housing and having disabilities, appeared to be positively related to a preference for professional home care. This means that both the need for intensive care and a greater degree of disability lead to an increasing preference for professional care.

Previous experience with either informal and/or professional care, in particular regarding help with housekeeping activities, increased the likelihood that that type of care would be preferred (Boom and Suurmeyer, 1989; Brody, Johnsen and Fulcomer, 1984; Kempen and Suurmeyer, 1989; Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997). The practical experience with either type of support obviously induces or stabilises the care preference of the elderly. The influence of previous experience with private care on the preferences of older people has not been studied until now.

The effect of individual values and attitudes to care decision making has been emphasised by several authors (Kane and Kane, 1982; McAuley and Blieszner, 1985; McCullough et al., 1993). Attitudes influence decision making by controlling the information allowed to deliberation (Sims, Boland and O'Neill, 1992). They represent the attitude towards receiving support that does not hold only for a specific care arrangement but for receiving

support in general. This attitude generalises during time from one particular situation and provider of services to a series of situations and providers which the individual experiences as a similar situation/service provider. Both, cross-sectional data and results of a one year follow-up study showed that the attitude of older people towards receiving support significantly adds to the prediction of preferences for care (Wielink and Huijsman, submitted[a]; Wielink and Huijsman, submitted[b]).
Evaluative criteria are the standards and specifications used by the elderly to compare various types of services. In other words, these are the desired aspects that accompany a certain choice, or the undesired aspects of a rejected alternative. A fine relationship with children, relatives or others appeared an important pre-condition for a preference for informal support; the most frequently stated evaluative criteria all relate to the quality of the relationship with informal helpers. The wish not to burden acquaintances is the most stated evaluative criteria in favour of professional care. A positive previous experience and the fact that professionals are renumerated for their services are the other, most frequently mentioned evaluative criteria in favour of professional care (Wielink and Huijsman, submitted[c]). In this previous study the evaluative criteria regarding home help/home care and private services were not separated.

In this report we present the results of a study of the relationship between the evaluative criteria that the elderly state to be important for their choice and a number of determinants of the preferences for care. We therefore purposely selected indigent older people (65+) because of their active engagement in the decision-making process on care.

7.2 Methodology

Data were gathered as part of the Rotterdam Elderly Study, a prospective follow-up study on the occurrence and risk factors of chronic disease and disability in the elderly (Hofman et al., 1991).

The Research Population
The study cohort was defined as all inhabitants aged 55 years and over of one district of Rotterdam (Ommoord) on January 1st, 1988. Of the 10.275 approached persons, 7983 (78%) participated in a baseline interview between April 1990 and July 1993.
The present study is concerned with a random sample of the participants who stated some difficulty with a minimum of one out of seven activities of daily living (Fries, Spitz and Young, 1982) in the first interview, who reached the age of 65, and who still lived independently on July 31, 1995. We invited 995 elderly people to take part in an interview, 361 declined participation and 22 could not be reached. Because of incomplete interview-data, 4 persons had to be excluded from the analysis. Therefore, the analyses presented here are based on 608 elderly persons (65+) living independently.

The mean age of the study group was 75.8 (range 65-98). A majority (72.9%) of the respondents was female. Most respondents (52.8%) lived with a partner and/or with others and 47.2% lived alone. A further description of the study group is presented in the appendix.

Operationalisation of Variables

Need for care: The need for care is defined by means of two hypothetical care-need situations: the need for long-term housekeeping assistance, and long-term personal care. We set four weeks as the dividing line between short-term and long-term care.

Alternatives: The basic assumption was that Dutch elderly are familiar with the regular care services (De Klerk and Huijsman, 1989; Van Dinter and Witteveen, 1991). The respondent could choose one from the following answers: home care by children, other relatives, neighbours, friends/acquaintances, private services, home help/home care organisations, residential care, private residential care or co-residence with family.

Preferences: The respondents were asked to imagine themselves in the two hypothetical care-need situations and then to state the person or organisation they most preferred to receive care from in each situation. In addition, respondents were told to ignore external hindrances such as financial or organisational considerations. Those who already received long-term housekeeping and/or personal care were asked to imagine they could make a new and free choice.

Evaluative criteria: After the respondents stated their preference, they were asked to motivate their choice on a free format basis. This question was intended to introduce the concept of evaluative criteria to the respondents. An instrument utilizing a forced-choice format (administered by card sort) was then used to measure the importance of various evaluative criteria by recording the ranking of twenty potential criteria (see Table 7.4.). We distinguished seven evaluative criteria in favour of informal support, six in favour of home help/home care services and seven in favour of private services. Respondents were asked to select the two most important criteria for their choice. The evaluative criteria were extracted from the results of case-studies (Wielink and Huijsman, submitted[c]).

Attitudes: Ten attitude statements representing the domains of autonomy, filial obligation, finances, and the quality concepts availability and the attitude/treatment of the elderly's helpers in relation to receiving informal and professional support, were administered to the respondents. The statements were aimed to scale the attitude of the respondents towards informal support on the one hand and professional care on the other hand. The various statements all related to important aspects of informal and/or professional care. The items were suggested and reviewed for face value by project investigators. Responses were measured on a 5-point Likert scale (1=strongly agree, 2=agree, 3=neutral, 4=disagree, 5=strongly disagree).

A principal components analysis was performed to determine whether one major attitudinal dimensions would be found. The components analysis resulted in one component with a value greater than 1.35, accounting for 36% of the total variance. All variables showed a loading of at least .50 on this component, except for two items. Whether or not the

variables comprise a scale was determined by computing the internal consistency by means of Cronbach's alpha. The reliability coefficient of a scale containing all ten items was .68. Removing the same two items that did not load very high on the above mentioned component, increased Cronbach's alpha to .73. Bases on these results we scaled the remaining eight items to the scale 'receptivity toward informal support'.

Experience with care: Registered were whether the respondents were receiving informal, home help/home care and/or private services at the time of the interview or in the previous five years.

Individual characteristics: The following characteristics were assessed: age, gender, household composition, level of education, level of income, feelings of depression (based on Zung's self-rating depression scale; Zung, 1965) and the subjective well-being (based on the scale for subjective well-being in the elderly; Tempelman, 1987).

Social characteristics: The number of contacts with networkmembers and the extent of received social support were assessed.

Actual need for care: In order to investigate the influence of the actual need for care of the respondents on the selection of care arrangements, this need was assessed by the need for support with activities of daily living (ADL) and instrumental activities of daily living (IADL; Fries, Spitz and Young, 1982), and the subjective health status.

Data Analyses

Relative frequency distributions of the preferences and evaluative criteria were calculated. The evaluative criteria only consider choices for informal support, home help/home care services and private services; the preference for entering residential care was left out of consideration because of the small number of respondents preferring this type of care. Backward stepwise logistic regression analysis for polytomous dependent variables (having more than 2 categories) was used to explore which of the individual, social, experiential and attitudinal variables explain and predict the preferences of the elderly. Since we expected independent relationships between all these variables and the preferences, the backward procedure was chosen. This way the first model includes all the independent variables and subsequently eliminates those variables that deliver no significant contribution to the model.

In order to simplify the interpretation of the results of the logistic regression analysis we checked all independent variables to determine the ability to dichotomise them. Except for the age and the attitude of the elderly which were continuous variables, all independent variables were dichotomised. The operational definitions of the variables are given in the appendix. Information on the psychological individual characteristics and the social indicators' is missing in this table, however. Regarding these characteristics the respondents were requested to answer a series of questions relating to each variable and responses were scored. The sum of each variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups. In the logistic-regression model we distinguished only informal support, home help/home care services, and private services.

7.3 Results

Preferences

For long-term housekeeping assistance, 17.8% of the respondents preferred to receive help from their children, 3.7% chose the assistance of other relatives, 0.3% was in favour of support from neighbours and 1.3% preferred to be assisted by friends or acquaintances (Table 7.1.). Almost half (49.3%) of the respondents was in favour of home help/home care services and over a quarter (27.3%) preferred the assistance of private services. None of the respondents choose for residential care subsidised by the government, but 0.3% would prefer to enter private residential care.

Almost three-quarter of the respondents was in favour of home help/home care services in case long-term personal care is needed. The percentages preferring informal support declined in this situation: only 10.6% would prefer to receive help from their children, 2.8% would choose the support of other relatives and 0.8 was in favour of friends or acquaintances. The percentage preferring assistance from private services was also considerably smaller (9.9%) in this situation. Still, only a small percentage would prefer to enter either subsidised residential care (1.0%) or private residential care (0.2%).

Table 7.1. Preferences regarding long-term housekeeping assistance and long-term personal care (percentages).

	Housekeeping	Personal care
N	604	601
children	17.8	10.6
other relatives	3.7	2.8
neighbours	0.3	-
friends/acquaintances	1.3	0.8
home help/home care services	49.3	74.7
private services	27.3	9.9
residential care	-	1.0
private residential care	0.3	0.2

Determinants

Results presented in Table 7.2. highlight the relationship between three long-term care choices and the different characteristics of individuals when compared with a given reference person (see definition in Table 7.2.). This reference person represents a 'common denominator' respondent. Thus, the reported characteristics represent a significant deviation of choice of respondents with this characteristics compared to the choice of the reference person.

All three experience-indicators appeared to be strong predictors of the preferences of older people for both long-term housekeeping assistance and personal care (Table 7.2. and 7.3.); the experience with a certain type of care is highly related with an increased preference for that type of support. The only exception is formed by the relationship between experience with home help/home care and the preference for these kind of services in case personal care is needed.

Table 7.2. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term housekeeping.

	Informal home care	Home help/care services	Private services
reference person	10.9	54.4	34.7
Experience with receiving care			
home help/care services	5.8	68.6	25.6
informal care	38.7	37.5	23.8
private services	6.1	9.3	84.6
Attitude; receptivity towards informal support			
high receptivity	30.4	26.7	42.9
low receptivity	2.8	76.9	20.3
Individual characteristics			
high education	9.3	41.2	49.5
Social characteristics			
large network	22.6	52.8	24.6
Actual need for care			
need for care (housekeeping)	10.5	65.9	23.6

Definition of the reference person: an elderly person who has a low level of education, a small network, has no experience with informal support, home help/home care or private services, is not in need for care and has an average receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit = 953, df = 1136, p = 1.00

Table 7.3. Probability of choice for care services for various characteristics of the elderly compared to a reference person (percentages); long-term personal care.

	Informal home care	Home help/care services	Private services
reference person	12.4	82.7	4.9
Experience with receiving care			
informal care	22.2	54.2	23.6
private services	13.8	75.5	10.7
Attitude; receptivity towards informal support			
high receptivity	35.7	52.4	11.9
low receptivity	3.4	95.4	1.2
Social characteristics			
large network	18.1	79.4	2.5
Actual need for care			
need for care (personal care)	6.6	91.3	2.1

Definition of the reference person: an elderly person who has a small network, has no experience with informal support or private services, is not in need for care and has an average receptivity towards informal support

Only variables that met the 0.05 significance level were included in this Table

Goodness of fit = 839, df=1231, p = 1.00

The attitude towards informal support is another strong determinant in both situations. A high receptivity is related to an increased preference for informal support, a low receptivity is found to relate to a preference for home care/home help services. Those with a high receptivity towards informal support seem to favour private services as well.
The only individual characteristic that is found to determine the preferences for long-term care affects housekeeping. Respondents with a high level of education tend to favour private services over the other types of support in that situation. The number of network-contacts appears the social characteristic that affects preferences in both situations. More contacts are related to an increased preference for informal support.
Finally, the actual need for either housekeeping or personal care of the respondent was found to influence the preference for both types of assistance; more disabilities were found to increase the preference for home help/home care.

Evaluative Criteria

Table 7.4. presents the evaluative criteria that were considered most important by respondents who either choose informal support, or home help/home care or private services. The most often stated motivations for choosing informal support appeared 'I prefer the help of my own relatives' and 'we use to help each other'. Apparently, the relationship with informal helpers is very important in determining the preference for informal care. This is also shown in the high score of the criterium 'I have a close relationship with him/her, I trust him/her'. The criterium 'In that case I do not have to depend on strangers' is another high scoring criterium that indirectly concerns the importance of the relationship with informal helpers.

'I do not want to burden the people I know' is the most stated motivation for choosing home help/home care services, immediately followed by the criterium 'The helpers of home help/home care organisations are experts'. These two criteria contain some sort of ambivalence that can also be seen in the two other frequently stated criteria 'I have good experiences with the help from home help/home care organisations' and 'I would not know who else to ask for support'. In case long-term personal care is needed, the criterium 'The helpers of home help/home care organisations are experts' is mentioned notably often.

The respondents preferring private services stated the following positive criteria for their choice: 'I have good experiences with the help of private services', 'Because you pay for private help, you have a choice in everything' and 'A private helper delivers better work'. For these respondents the expertise of the helpers also was an often stated reason for choosing this type of care in case long-term personal care would be necessary.

Comparing Determinants and Evaluative Criteria

The determinants that are particularly related to a preference for informal care are: experience with informal support, a high receptivity towards informal support and a large network. Evaluative criteria in favour of informal support all relate to a good relationship with the informal helper. Comparing these results, much concordance can be observed. Although not many respondents mention the experience with informal helpers as an important reason for their choice, almost all respondents (88.1%) have experienced informal support. Besides, the criterium 'We use to help each other' contains the experience-aspect as well. Furthermore, the receptivity towards informal support, a general positive attitude towards informal support, is shown throughout the evaluative criteria that were mentioned by the respondents. The impact of many network contacts on the preference for informal support on the one hand, and the good relationship with informal helpers as a condition to favour informal support, seem in complete agreement.

Table 7.4. The most important evaluative criteria respondents stated for their choices for long-term housekeeping and personal care.

	House-keeping	Personal care[a]
In favour of informal support:		
I have a close relationship with him/her, I trust him/her	9.7	2.6
I prefer the help of my own relatives	11.9	3.2
I have good experiences with the support of this person	3.5	1.2
We use to help each other	10.5	2.5
I cannot afford the help of others	1.7	-
I do not have much faith in home help/home care services	1.2	0.3
In that case I do not have to depend on strangers	9.6	1.9
In favour of home help/home care services:		
I do not want to burden people I know	24.8	3.0
The helpers of home help/home care organisations are experts	22.7	8.6
I have good experiences with the help from home help/home care org.	17.0	4.1
I would not know who else to ask for support	16.8	8.2
I cannot afford the help of private services	10.9	5.0
I that case I do not have to arrange things myself	6.6	4.0
In favour of private services:		
I do not have much faith in home help/home care services	4.3	1.2
I have good experiences with the help of private services	11.5	0.3
A private helper is an expert	2.9	4.3
I do not want to burden people I know	6.9	2.3
Because you pay for private help, you have a choice in everything	11.3	1.4
A private helper delivers better work	9.5	1.3
With a private help you can enter into relations	6.7	2.0

[a] Evaluative criteria in case of a need for long-term personal care were only selected by those respondents whose choice deviated from that in the housekeeping situation (38.5%)

Regarding home help/home care services, the experience with this type of support, a low receptivity towards informal support, and the actual need for care were found to be the most important determinants. Next to the good experiences and qualifying home help/-home care workers as experts, the wish not to burden acquaintances or just not knowing who else to ask for help, were the most frequently stated evaluative criteria in favour of home help/home care services. The correspondence of these results with regard to the experience-aspect is self-evident. The low receptivity towards informal support is reflected in the criterium 'I do not want to burden people I know' and to a lesser degree in 'I would not know who else to ask for support'. A relationship between the actual need

for care as a determinant of a preference for home help/home care services and the self-stated evaluative criteria might be represented by the wish for expertise of helpers mentioned by frail elderly. The latter seems even more true when the importance of this aspect in the situation that long-term personal care is needed, is taken into account.
The experience with private services and a high education-level are the most striking determinants in favour of private services. Good experiences, freedom of choice and a good qualification of the work of private helpers are the most stated evaluative criteria for choosing this type of care. Again, the similarity between the experience-aspects is obvious. A final relationship might be assumed between a higher education-level and a the appreciation of freedom of choice.

7.4 Discussion

In the present study only a very small percentage (< 1.0%) of the respondents preferred to enter either subsidised or private residential care. We, therefore, conclude that indigent older adults prefer to live in the community for as long as possible even when they would need long-term intensive care. The study group showed a strong preference for professional care; over 75% of the respondents choose for home help/home care or private services. Private services were far more preferred for long-term housekeeping, which probably reflects the unfamiliarity of the Dutch elderly with private services in a chronic personal care setting. But with the introduction of private service organisations in Dutch health care, demand for these kind of services may very well rapidly increase.
The ultimate objective of the present study was to describe and compare the evaluative criteria the elderly state for their care decisions and the independently assessed determinants of the preferences. We found the attitude towards receiving care to be the most influencing determinant of the preferences of the elderly; the receptivity towards informal support is a good predictor of the choices for either informal home care, home help/home care services or, to a lesser degree, private services. Our findings show that many of the most important self-stated evaluative criteria reveal parts of the integral attitude towards the various care suppliers. The most often stated criteria chosen by the respondents in favour of informal were the most convincing. The criteria 'I prefer the help of my relatives' and 'we use to help each other' are very clear indicators of the positive attitude of these elderly towards informal support. Of course, most of the people expressing such criteria live in favourable circumstances; they probably have potential helpers in their neighbourhood and there is a mutual consent concerning the issue of support.
More complicated seems the choice for home help/home care services. The receptivity towards informal support is shown limited, the criteria supporting a preference for home help/home care services are divisible into two major groups, though. One group of older adults applies for professional home care because they actually would prefer this kind of support. They have good faith in these helpers and qualify them as experts. The other

group of elderly, otherwise, appear more or less urged to opt for professional home care for reasons of a deteriorated health-status and either a wish not to burden their family or friends or the absence of potential helpers. So, while some elderly prefer a home help/home care organisation for the fine quality of the work they deliver, others choose the same help as a last resort in case they become disabled. The preference for private services, conversely, is only accompanied by a strong and positive attitude of it's advocates; a private helper delivers better work. Again, these elderly make their choice out of favourable circumstances, since this kind of support is the most expensive and is not subsidised by the government.

Summarising these results they indicate shortcomings of the attitude-scale to measure the integral attitude of elder people towards receiving care. Issues concerning private services in general and the important aspects concerning all three types of support, but professional home care in particular, might be added. Assessing attitudes on all important evaluative criteria, taking all possible services into account, would make an effort to determine the integral attitudes towards receiving care which represent the precursors of the care preferences of older people.

The previous experience with receiving care is the second important determinant in predicting the preferences of elderly people. In view of the self-stated evaluative criteria many respondents recognise this influencing factor since it is often stated in favour of professional home care and private services. Although, the supporters of informal help did not explicitly mention this issue, in the criteria they stated the experience aspect can be retrieved easily.

Related to the influence of experience with care is the dynamic of 'induced demand': if services are readily available, people are more likely to have experienced them, and consequently, to prefer them. The increased preference for home help/home care and private services must be understood against a background of increased availability of public and private help on the one hand, and to the societal attitudes and expectations that there should not be too much reliance on informal care. Arguably, the more publicly-funded or private services are available and generally used, the more it is likely to appear to disabled elders and their helpers that heavy reliance on informal carers is an imposition, a burden. Thus, the more home help/home care and private care is provided, the more this is likely to create attitudes in favour of, and preferences and demand for, these services by both elderly people and their network members.

Earlier research showed a certain impact of individual and social factors representing 'frailty' on the care decision making (Wielink, Huijsman and McDonnell, 1997); a higher age, a low level of well-being, poor mental health, less social support, etc., appeared to be positively related to a preference for professional home care. Such effect has not been demonstrated in the present study, which can probably be contributed to the constitution of the research population. Since we only included disabled older people in the sample, no major differences between the preferences on the basis of 'frailty' were present. However, as research showed shifting preferences in the course of aging, it would be worthwhile to study the development of the evaluative criteria of the older adults over time.

A final issue concerns the importance of the freedom of choice; an often mentioned criterium by the supporters of private services. Determining who is coming to help you and what you want this person to do for you has most probably much impact on the feeling of independence. Ordering private services contributes to superior levels of functioning or activity, for example self-respect and authority. The finding that a higher education-level is related to an increased preference for private services might be based on this principle; assuming that a higher education-level goes together with higher levels of self-awareness, self-respect, etc., this could explain the increased appreciation of the freedom issue of private services.

A last remark on the research presented in this article concerns the relevance of knowledge on the care preferences of community residents, the evaluative criteria they state and the determinants that can be observed. Both society and the elderly could benefit from the steering of future health care planning on the basis of the wishes of potential users (Wielink, De Klerk and Huijsman, 1995; Wielink, Huijsman and McDonnell, 1997). However, this process will be most efficient when not only the well-known influencing factors will be taken into account, but also the aspects the elderly themselves find important in determining their choice. So, next to often assessed determinants, like age, sex, health-status, etc., more complicated determinants like the integral attitudes towards services, should be allowed for in determinant analyses of the future preferences for care.

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Appendix

Table 7.A. Characteristics of the study population and operational definitions of the individual variables (N=608).

Variable	Definition	%
Experience with receiving care		
home help/home care	1 = home help/home care at the time of the interview, or the previous 5 years	35.2
informal support	1 = informal support at the time of the interview, or the previous 5 years	88.1
private services	1 = help from private services at the time of the interview, or the previous 5 years	22.2
Attitudes		
receptivity towards	continuous (multivariate analyses)	
informal support	1 = high receptivity	23.8
Individual characteristics		
age (years)	continuous (multivariate analyses)	
	0 = 65 - 74	60.2
	1 = 75+	39.8
gender	1 = female	72.9
household composition	0 = living alone	47.2
	1 = living with partner and/or others	52.8
education level	0 = only primary education	50.3
	1 = also advanced education	49.7
income	0 = only a state pension	34.2
	1 = other income above the state pension	31.4
	2 = unknown	34.4
Need for care		
need for care (IADL)[a]	1 = much need for IADL care	44.7
need for care (ADL)[a]	1 = much need for ADL care	52.8
subjective health status	0 = (very) well	43.6
	1 = reasonable or bad	56.4

[a] Respondents were requested to answer a series of questions relating to the variable and responses were scored. The sum of the scores for the variable was calculated and the study population was dichotomised by dividing it in two (almost) equal groups

8

General Discussion

8.1 Introduction

This thesis explores the care decision-making process of elderly community residents. In this final chapter, an overview will be presented of the results of the studies described in previous chapters. Not all results will be summarised again here. The most important findings will be reviewed in the light of the objectives of this thesis as formulated in the introduction. The similarities and differences between the outcomes of the various studies will also be highlighted. Before we come to this overview, the qualities and limitations of the investigation will be considered. Finally, the relevance of research on the care decision-making process will be elaborated upon.

8.2 Qualities and Limitations

Concepts

A conceptual model was developed to serve as a basis for the empirical research on the care decision process of elderly community residents. This concept was based on the Consumer Behaviour Model which combines the economic rational choice theory and a psychological behaviourial intention model. The use of this model emanated from current developments in health care and the care of the elderly; stimulation of the consumer role of health care users and the introduction of competition among suppliers of health care services. In view of the objectives of this thesis - collecting information on the development of care preferences and it's determinants - the underlying conceptual model served well in describing and explaining these preferences.

However, where various scientific disciplines use comparable theories with a different emphasis, other concepts might have been used to describe and explain the development of care preferences. Yet the use of the Consumer Behaviour Model underlying the

conceptual model for preference development seems appropriate. Furthermore, Steverink (1996) conducted a study on the orientation towards residential care facilities among the physically impaired elderly that was based on the social production function theory. The findings of her research indicated a certain independence of the results of preference research of the underlying concept as they roughly indicated the same determinants for the care decision process.

The elaboration of the conceptual model through empirical research is another asset of this thesis. Untested hypotheses have been studied both very extensively and in great detail. At every subsequent step, special attention was given to the explanation and elaboration of a new aspect that complemented the concept. In this way, verification of theory and empirical development were extended further and further.

The hypothetical care-need situations enabled us to administer both standardised and different situations to each respondent, which considerably improves the comparability (standardizing) and the validity (different realistic situations) of the findings. However, this method of hypothetical care-need situations also has some limitations. Besides the fact that it is not possible to verify the extent to which respondents have been able to imagine themselves in the various situations, their current or previous care-need may also have an effect upon their ability to place themselves in the four care-need situations. Respondents who have had either short or long-term need of any kind of support might better be able to imagine these situations than those respondents who have never experienced such circumstances. The actual care-need of the respondents might also interfere with the interpretation of the fictitious situations. Therefore, both the actual care-need and previous experience with receiving care were taken into account in the analyses of preferences.

Respondents were asked to state the most preferred provider of services. They should abstract from all other kinds of constraints. Using this method the pure, unbiased preferences of elderly community residents would come to the surface. However, it remains unclear whether this has actually been accomplished; can the respondents mention the most preferred caregiver without thinking of practical barriers? On the one hand, this particular assessment of preferences most probably comes closest to our objective of assessing a pure, unbiased preference. The analysis of the evaluative criteria, on the other hand, ensured that the respondents considered at least some constraints in their evaluation of the alternative providers of support. For example, the high costs of home help/home care or private services were mentioned as a reason not to choose this kind of support. In this particular situation, however, it cannot be determined whether the respondents really cannot afford such help or whether they do not want to spend a certain amount on that kind of support. Another constraint that was mentioned as an evaluative criterium is the statement 'I doubt whether people I know would help me', while we actually wanted to know what the respondents wanted themselves. Nevertheless, only few respondents stated these figurative evaluative criteria.

Design

Five studies were performed to assess the development of elderly's care-preferences and it's determinants, as described in chapter 2 to 7. The studies varied in the inclusion criteria of the research population: the first study included single elderly persons of 75 years and over, the second concerned a representative population of elderly above the age of 65 and the last three studies included older adults (60+ or 65+) with a moderate disability. This variety in the research populations enabled us, first, to assess the preferences of various groups of elderly community residents and, second, to compare the results and analyze trends in the differences between them. Of course, the determinant analysis also played a part in this comparison. Notwithstanding the advantages, the variation in the research samples also contains some risks. In comparing the preferences of various populations of community residents caution should be observed. Moreover, in case of generalizing the findings, the exact population for which the results hold should be emphasised.

Because of the stepwise composition of the studies, an optimal elaboration of the preference development model could be achieved. In the course of the project it was therefore possible to maximise the number of possibilities to choose a preference from on the basis of alternatives that were stated by respondents in former studies. Likewise, the evaluation criteria could be composed step by step: By means of case studies a first impression of the spectrum of evaluative criteria was identified. Then a selection of these criteria was administered to the respondents, but they could still add to the collection by mentioning new evaluative criteria. A last, complete set of alternatives was used in the final study. Finally, a stepwise approach was used in the determinant analysis as well. The consecutive studies were complementary, each of them focused on another part of the preference development model; the final study aggregated the information of all former research.

Validity and Reliability

Neither the response rates, nor the answering of the questionnaires gives reason to distrust the validity of the research. The response rates of the studies vary from 53% to 62%, which are quite usual rates in Dutch surveys. As discussed in the various chapters there is no evidence for selective bias in the studies, except for the attrition in the follow-up study which was described in chapter 5. Whenever a questionnaire was incompletely filled in, this respondent was removed from the analysis. Regarding the questions on preferences and evaluative criteria few respondents did not answer all questions completely. However, this concerned such small numbers so that the validity was not endangered.

The results of the performed studies showed much consistency, although for each of the studies very different inclusion criteria were used. The fact that the studies showed far more similarities than differences is a strong argument in favour of their validity. The various studies identified the same strong determinants for the preferences of elderly community residents. Furthermore, when taking these determinants into account, the differences regarding the care preferences that were found between the different study

samples can mostly be explained. Moreover, the final study showed that the evaluative criteria did indeed provide the expected clarification and refining of the care decision-making process. To check whether the results of the preference assessments are stable a test-retest was performed. Both the assessments of the preference for housekeeping assistance and personal care were found to be highly reliable, cohen's kappa was 0.85 and 0.82 respectively. The test-retest reliability of the assessment of the evaluative criteria was less high, but could be brought to a reasonably high level by altering the assessment procedures. In the final study this altered procedure was performed.

Limitations

A rather important limitation of the studies was the assessment of only the elderly's preferences for care, while gerontological literature makes it clear that network members are highly influential in the elderly's decisions on care (Allen, Hogg and Peace, 1992; Gerritsen, 1993; Pratt et al., 1989). However, the purpose of the studies described in this thesis was to assess the actual care preferences of the elderly irrespective of the opinions of people surrounding these decisions such as network members. The results of the various studies showed the influence of social characteristics, such as the extent of the network or the social support received, on the preference development of the elderly. Yet, we were not able to include an assessment of the preferences of network members in order to analyze it's effect on the elderly's preferences. This aspect deserves particular attention in any future research to be conducted.

Another limitation of the studies concerns the discrepancy between the preferences the elderly state and the actual choice they make. The rational choice theory assumes constraints to be the barriers between preferences and choices. In one of the studies (described in chapter 6) we asked the respondents whether they thought that the person/organisation of their first choice would actually provide care when they would need it. Over 60% of the respondents thought they would receive support from the person/organisation of their first choice. Some respondents did not think they would receive the help from the person/organisation they preferred, for example because this person would not have time to provide the support (16%) or because of waiting lists for that particular type of care (7%).

Unfortunately, the results of the studies described cannot be directly generalised to other countries in or outside Europe. Since the health care systems of all countries are highly differentiated, it seems unlikely that the preferences of the Dutch elderly show much similarity to that of the elderly in other countries. Moreover, it is highly likely that the culture surrounding health care - embodied as it is in preferences, attitudes, and service awareness, for example - is tied to a single country. The results of the research do, however, give insight into the mechanisms that underlie the development of preferences. The studies show a manner of assessing preferences in various care-need situations which will be as important in other countries. Furthermore, evaluative criteria and determinants were suggested that might be very useful in analyzing the preferences of the elderly in other countries.

8.3 Conclusions

Preferences

The first objective of this thesis was to discover the care preferences of elderly community residents. During the project we could assess the preferences of various groups of the elderly with differing characteristics. In Table 8.1. the results of the assessments in these groups are summarised.

Firstly, it can be concluded that all studies show the same trend related to the intensity and duration of care: the preference for informal support declines when personal and/or long-term care is needed. Respondents of a representative sample appeared to be the most in favour of informal support. Two groups, single elderly people over 75 and living independently and respondents with a moderate disability, choose informal support less often and preferred home help/home care services instead. The first group also showed an increased preference for residential care. In the one-year follow-up study the moderately disabled elderly had switched their preferences in favour of professional home care and residential care. Finally, the moderately disabled older people were found to be the least interested in the help of informal support when assessed in a three-year follow-up. This follow-up also differs in the small number of respondents choosing residential care. Since private services could not be chosen in all care-need situations, it is difficult to synthesise the results of the studies. However, help from private services appears an important source of support, particularly in case housekeeping assistance is needed.

It is worth mentioning that the variation between the first and later studies with regard to the number of care-need situations that were presented to respondents might be construed to be the cause of some change in stated preferences. However, while the respondents reported in chapter 5 were questioned on all four care-need situations (although we only reported the results of two) and the respondents in chapter 7 were only presented with two care-need situations, the preferences they expressed proved, nevertheless, to be very similar. This would suggest that the effect of administering various number of care-need situations appears limited.

Determinants

The second objective of this thesis was to identify important determinants of the development of preferences for care. The performed studies offered the opportunity to verify hypothetical relationships between different characteristics of the elderly and their preferences in interchanging circumstances. Nevertheless, the results of the studies were very consistent in determining important factors that influence the development of preferences for care. Table 8.2. shows the determinants for the various kinds of support. The overview of the important determinants shows that all the hypothesised relationships between categories of influencing factors and the development of preferences were verified in the project.

Table 8.1. Preferences of respondents in four studies (percentages).

	Housekeeping activities		Personal care	
	short-term	long-term	short-term	long-term
Population: 75+, living alone (chapter 2).				
children	40	31	24	21
neighbours/friends/acquaintances	10	-	4	-
private services	17	15	-	-
home help/care services	33	43	72	65
residential care	-	11	-	14
Population: 65+, representative (chapter 3).				
children	47	37	33	28
neighbours/friends/acquaintances	7	-	3	-
private services	19	-	-	-
home help/care services	27	56	64	63
residential care	-	7	-	9
Population: 65+, moderately disabled; basic assessment (chapter 5).				
children		30		22
neighbours/friends/acquaintances		-		-
private services		-		-
home help/care services		63		68
residential care		7		10
Population: 65+, moderately disabled; one-year follow-up (chapter 5).				
children		23		15
neighbours/friends/acquaintances		-		-
private services		-		-
home help/care services		67		73
residential care		10		12
Population: 65+, moderately disabled; three-year follow-up (chapter 7).				
children		18		11
neighbours/friends/acquaintances		6		3
private services		27		10
home help/care services		49		75
residential care		-		1

The attitudes towards care appeared to be highly influential on the preferences of the elderly. Since the used scale 'receptivity towards informal support' concerned mainly informal and professional care, it seems normal that the attitudes affect mainly these kinds of support. However, attitudes on private or residential services can also be assumed to influence the elderly's preferences for care. Previous experience with some kind of support is another strong determinant of the preferences for care. Although previous experience with residential care was not considered in this study, such experience may also affect the preferences of the elderly.
The influence of the individual and social characteristics can be summarised in the extend of frailty: frailer old people tend to favour professional home care and residential care, the 'stronger' elderly show an increased preference for informal support. The socio-economic status was found an exception to this rule since a higher socio-economic status was related to an increased preference for home help/home care or private services. Finally, great age was found to be a strong determinant of a preference for residential care.

Evaluative Criteria
The subjective arguments the elderly themselves state to be important for their choice, the evaluative criteria, were assessed in order to compare these with the independently assessed determinants. Solid social relationships appeared the most important evaluative criterium of the preference for informal support. The most important evaluative criteria in favour of home help/home care services is bipartite: On the one hand, being independent of informal helpers is important while, on the other, a positive experience with this type of care is a significant determinant. A positive previous experience, together with freedom of choice, are the most important reasons for opting for private services.

Further Elaboration on the Findings
In this section we will examine the differences between the assessed preferences in the various study populations described earlier. On the basis of the determinants that were found relevant, many of these differences can be explained. The respondents of the representative population who were 65 years and over proved to be the most receptive towards informal support. Since this group probably contains both relatively few frail elderly and relatively few elderly who have experience of help with housekeeping activities or personal care, the increased receptiveness towards informal support is in agreement with expectations. Both older respondents (75+) living independently and respondents with a moderate disability appeared less receptive towards informal support. Again, the fact that these groups contain more frail and experienced elderly may explain these results. The difference between these two groups, the fact that the older respondents were more in favour of residential care, is also in line with the results of the determinant analyses.

Table 8.2. Overview of the determinants and evaluative criteria in favour of various kinds of support.

In favour of **informal support:**	In favour of **private services:**
Determinants: - high receptivity towards informal support - previous experience with informal support - low socio-economic status - presence of few 'frail' factors *Evaluative criteria:* - solid relationship with informal helpers	*Determinants:* - previous experience with private services - high socio-economic status *Evaluative criteria:* - good experiences with private services - freedom of choice
In favour of home help/care services:	**In favour of residential care:**
Determinants: - low receptivity towards informal support - previous experience with home help/ home care services - high socio-economic status - presence of many 'frail' factors *Evaluative criteria:* - good experiences with home help/home care services - independence from informal helpers	*Determinants:* - great age - presence of many 'frail' factors

The results of the follow-up assessments made clear the notion that attitudes towards receiving care develop particularly when the elderly experience or become familiar with a need for care. During the one-year follow up it was discovered that the moderately disabled elderly had become more receptive towards professional home care and residential care, mainly as a result of a shift in attitudes. Respondents with a moderate disability who were interviewed three years after health problems were first indicated showed similar preferences for professional support. This result is a strong argument in favour of the reasoning laid out earlier. However, in contrast to respondents in the earlier studies, this moderately disabled elderly showed a strong preference for private services and showed almost no interest in residential care. This effect can partly be explained by the fact that the option of private services was often not included in the studies, but it may also be explained, in part, by a temporal shift that accompanies the development of the elderly's preferences. In a Norwegian study, Daatland (1990) described a substantial increase in the preferences of the elderly for professional care in 1985 when compared to 1969, which he attributed to a wider availability of, and familiarity with, professional

care. In our study we observed two opposite trends: the preference for private services has recently been increasing while the preference for residential care has continually been in decline. The increase in the preference for private services might be attributed to expanded availability and familiarity, particularly of private personal care facilities. Moreover, the recent introduction of the personal attendance allowance, which enables the elderly to use private services, might also explain part of the increase (Beleidsbrief persoonsgebonden budgetfinanciering, 1995). The decreased interest in residential care is most probably the result of Dutch government policy which discourages its use. During the early nineties there was much uncertainty surrounding policy on care for the elderly due to the on-going debate on the best course to follow. Moreover, while the elderly themselves have always wanted to remain in their own homes for as long as possible, the Dutch government has been promoting and creating such possibilities only over the past few years (Nota thuiszorg in de jaren '90, 1991; Nota voorzieningen om langer zelfstandig te blijven, 1994).

At this point the findings on the increased preference of the frail elderly for professional home care and residential care should be coupled with findings of Broese van Groenou (1995) on the support potential of the network members of Dutch older adults. From her research she concluded that with the decline of important personal resources (age, health, the presence of a partner), the proximate network also decreases in both size and support potential. Therefore, the decrease in a preference for informal support is accompanied by a decrease in the possibilities of informal help.

The need for care was assessed on the basis of four hypothetical care-need situations in which the respondents were asked to project themselves. Nevertheless, discrepancies between the actual need for care of the respondent and some or all of these situations seem likely. We therefore checked the relationship between the actual need for care of the respondents and their preferences. The analysis on the representative population showed an effect of the actual need for care of the respondents on their preferences for housekeeping assistance. The effect disappeared, however, when the attitudes of the respondents were also taken into account. None of the studies on the selected populations showed a relationship between the actual need for care and the preferences for care, except for the last study which indicated the need for care as a determinant for both the preference for housekeeping assistance and personal care. Summarising these results it remains unclear whether the discrepancy between the imaginary and the actual need for care has much impact on the outcomes of the preferences as assessed in our studies.

Both the determinants and the self-stated evaluative criteria were supposed to explain and clarify preference development. The determinants gave insight into the factors that influence the care decision-making process. In determining the evaluative criteria the overlap between both concepts became visible. However, the assessed evaluative criteria completed the findings by making them more explicit, and by clarifying and nuancing the factors that influence the development of preferences.

Returning to the Preference Development Model on which the empirical research was based it can be stated that the findings of the various studies mostly confirmed the

supposed hypotheses. The variation in the preferences on the four care-need situations pointed out a trend which was found in all studies, indicating prove for the expected differentiation of preferences in relation to the extend of the need for care, and a certain stability of these finding as well. In the first studies individual and social characteristics, as well as experiential indicators, were included in the determinant analyses. The Preference Development Model assumed a closer relationship between the experiential indicators and the preference development which was indeed demonstrated by the results of these investigations. The attitudinal compound was added in the next study, in order to study this indicator in particular and to calculate its additional effect on the preference development. In line with the expectations the attitudes showed a strong and independent effect on the preference development which even exceeded the influence of earlier experiences. Practical drawbacks did not allow for testing the involvement of the evaluative criteria in the preference development process. However, the analyses in the last chapter made clear that the self-stated determinants add significantly to the clarification of the preference development process. Two studies in which preferences were assessed after a follow-up period emphasised the influence of 'being engaged in the process of needing care' on the preference development, as the actual need for care, the experience with receiving care and the attitude towards care were shown to be important determinants in the elderly's opinions.

8.4 Implications for Society

This study took place at a time of considerable debate on the future of health care for the elderly. On the one hand, there has been an increasing commitment by successive governments to a policy of increasing the independence of the elderly and delivering care that is made-to-measure (Nota zorg voor ouderen, 1986; Nota ouderen in tel, 1990; Beleidsbrief persoonsgebonden budgetfinanciering, 1995; Integraal actieprogramma ouderenbeleid, 1995). On the other, however, this policy has seen many different faces in its elaboration within the framework of cost control.

Economic concerns have dominated the planning of future services for the elderly (Allen, Hogg and Peace, 1992; Gerritsen, 1993; Van den Heuvel, 1989). This first began in the nineteen-seventies with de-institutionalisation: the option of residential or nursing home care should only be considered when elderly people had reached very high levels of dependency and when public and informal sources of care can no longer keep them at home. This policy was later accompanied by 'substitution' and the reinforcement of home help and home care respectively. Stimulation of informal support fulfilled the movement towards living independently for as long as possible. This whole policy was based on two premises: that living at home is what elderly themselves want, and that this is the best way of using finite resources, in spite of the fact that it has been recognised that community care is not necessarily a cheap option. Nevertheless, it was not until the nineteen-

nineties that the Dutch authorities introduced the personal attendance allowance which enables elderly disabled people to spend an individual grant on the kind of support they prefer.

Although the introduction of the personal attendance allowance is a substantial step in the right direction in the emancipation of elderly people, both the Dutch government and the elderly themselves could benefit even more from knowledge of care preferences. A personal grant enables elderly disabled people to finance the person or organisation they prefer to help them. However, an important condition for a free choice is the availability and accessibility of the preferred option. It is this aspect that offers the government the opportunity to fully exploit their policy; being able to anticipate the wishes of the elderly would enable them to actually provide care that is 'made-to-measure' in the future. In addition, by steering these preferences it might be possible to bring about future shifts in them and their concomitant use of services in a direction more in line with the authorities' long-term policy.

The findings of this thesis indicate an increasing preference of elderly people for non-informal support, particularly when long-term and/or intensive care is needed, and in cases where the extent of disabilities is increasing. Nevertheless, the number of disabled elderly choosing to enter residential care is declining. It is the case that professional home care, both home help/home care and private organisations, should be able to provide services to more than 70% of the disabled elderly.

Besides this rather high percentage of disabled elderly who prefer non-informal support, developments in the near future might lead to even greater interest in this kind of help when the influence of preference determinants is taken into account. Throughout the world the aging population phenomenon, and even double-greying, is becoming evermore visible. This tendency will result in an increase of elderly people with disabilities. Together with the dynamic of 'induced demand' - if services are readily available, people are more likely to have used them - the inevitable escalation in experience with all kinds of help may lead to an increased receptivity to non-informal support. A strengthening of this development might be accomplished by a boost in the socio-economic status of the elderly, which would then enlarge their interest in home help/home care and private services. Furthermore, the evaluative criteria that were stated by respondents in our studies make clear that, in line with the emancipation process of the elderly, independence and freedom of choice are important pillars of recent and future care preferences, and these qualities seem to be especially attributed to professional home care. Both the limited growth in the number of informal carers over the next years (De Boer et al., 1994) and a reduction in the number of intramural beds (Nota ouderen in tel, 1990) would make an expansion of the professional home care sector seem unavoidable.

The findings of our studies suggest that the government's policy of discouraging intramural care is in line with the preferences of the elderly, only the most frail elderly prefer to enter residential care. Substitution of intramural care by professional care is another point of agreement between the authorities' policy and the wishes of the elderly. Moreover, the introduction of the personal attendance allowance enhances the independence and the

freedom of choice, which is indeed very much appreciated by older disabled people. However, it is the government's responsibility to ensure that both home help/home care and private services are available to a sufficient degree, thus fulfilling the pretensions of their policy.
One final point on the government's policy of stimulating informal care, a policy yet to be worked out. The elderly have become less interested in informal support, and potential informal carers have not become more cooperative in the care of the elderly. The strategy on this matter should therefore be reconsidered. Should this stimulation policy be adhered to, it would seem appropriate to make both the elderly themselves and their potential helpers more receptive to the advantages of informal support (see also chapter 4). Moreover, attractive benefits, such as parental support leave, should be created to stimulate this kind of help.

In conclusion it can be stated that the introduction of the personal attendance allowance is a substantial improvement of the emancipation process of the elderly. The personal budget enables the elderly to choose the kind of support they prefer and order those tasks they wish to be executed. However, information on care preferences should also be used for the future planning of care services for the elderly. The knowledge is useful in determining which services should be expanded or reinforced in order to accurately adjust the care facilities to the wishes of the users. On the basis of the same data the government might even decide to try to modify the preferences by specific measures. Nonetheless, all these activities require accurate, detailed and up-to-date information on care preferences.

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Samenvatting

In het licht van de steeds verdergaande veranderingen in de zorg voor ouderen en de beperkte aandacht voor de wensen van hulpbehoevende ouderen hierbij, worden in dit proefschrift de voorkeuren van ouderen voor hulpverlening beschreven en determinanten van deze voorkeuren bepaald. Informatie over de preferenties voor hulpverlening kan worden gebruikt in verschillende fasen van het plannen van voorzieningen voor ouderen. Voorkeuren van hulpbehoevende ouderen kunnen als leidraad dienen voor het leveren van 'zorg op maat'. Wanneer op basis van de preferenties van toekomstige hulpbehoevende ouderen verschillen tussen vraag en aanbod worden voorspeld, kunnen beleidsaanpassingen voor de middellange termijn worden geïnitieerd. Overheden kunnen zelfs overwegen om ongewenste toekomstige trends in het gebruik van voorzieningen door middel van tactische maatregelen van richting te doen veranderen.

Op basis van het 'Consumer Behaviour Model' is een conceptueel model voor de ontwikkeling van voorkeuren voor hulpverlening ontwikkeld, hetgeen geoperationaliseerd is door middel van het 'Preference Development Model'. Het model beschrijft het traject van het erkennen van de behoefte aan hulp tot en met het vaststellen van een voorkeur voor een bepaalde hulpverlener/hulpverlenende instantie. Bovendien kent het model een aantal factoren dat van invloed is op dit traject, onderverdeeld in de volgende vijf groepen: individuele kenmerken, sociale factoren, ervaring die ouderen hebben opgedaan met het krijgen van hulp, de houding ten aanzien van het krijgen van hulp en evaluatie criteria die ouderen hanteren bij het vaststellen van de meest geprefereerde hulpverlener.

In de hoofdstukken 2 tot en met 7 worden verschillende empirische studies beschreven die alle een bijdrage leveren aan de invulling van het 'Preference Development Model'. Voordat we echter ingaan op de verschillende bijdragen van deze studies zullen we eerst het in iedere studie terugkerende basisscenario bespreken. Aan de respondenten in de verschillende studies werd een aantal gestandaardiseerde hulpbehoefte situaties voorgelegd. Wij onderscheidden: kortdurende huishoudelijke hulp, kortdurende persoonlijke verzorging, langdurige huishoudelijke hulp en langdurige persoonlijke verzorging. Vervolgens werd de respondenten gevraagd om zich in elk van de situaties in te leven en die persoon of instantie te noemen waar men het liefst hulp van zou krijgen. Daarbij werd de respondent verzocht geen rekening te houden met allerlei verstorende factoren, zoals financiële of organisatorische restricties.

In hoofdstuk 2 wordt de eerste empirische studie naar de voorkeuren voor hulpverlening gepresenteerd. In deze studie werden de preferentie-vraagstukken aan alleenwonende ouderen van 75 jaar en ouder voorgelegd. Via mondelinge interviews werkten 498 ouderen uit 6 'randstad' gemeenten mee aan het onderzoek. De invloed van het ontwikkelen van een voorkeur, van zowel individuele en sociale kenmerken van de ouderen als de ervaring die de ouderen reeds hadden opgedaan met hulpverlening, werd nagegaan. Indien men kortdurende huishoudelijke hulp nodig heeft, heeft ongeveer 50% van de respondenten een voorkeur voor professionele hulpverlening. Dit percentage neemt toe wanneer men persoonlijke verzorging of hulp voor langere tijd nodig heeft. Bijna 80% van de ouderen verkiest professionele hulpverlening wanneer zij langdurig persoonlijke verzorging nodig zou hebben. Het reeds ontvangen van professionele huishoudelijke hulp en depressiviteit, met name bij een hoge sociaal economische status, blijken het sterkst bepalend te zijn voor een voorkeur voor professionele hulp. Daarentegen gaan een hoge leeftijd en het reeds ontvangen van informele huishoudelijke hulp samen met een voorkeur voor informele hulpverlening.
Een representatieve groep zelfstandig wonende ouderen van 65 jaar en ouder uit de drie Noord-Oost provincies is het onderwerp van studie in hoofdstuk 3. Op basis van mondelinge vraaggesprekken en schriftelijke aanvullingen werden gegevens van 2991 personen verkregen. In deze studie werden met betrekking tot het 'Preference Development Model' dezelfde onderdelen als in de voorgaande studie bekeken, dus de individuele en sociale kenmerken van de respondenten, en de ervarings-indicatoren. Echter, in deze studie was de invulling van deze kenmerken uitgebreider. Evenals in het vorige onderzoek blijkt ook uit deze studie dat de voorkeur voor professionele hulpverlening sterk toeneemt wanneer men persoonlijke verzorging of langdurig hulp nodig heeft. Indien men langdurige persoonlijke verzorging nodig heeft, kiest meer dan 60 % voor professionele thuiszorg en bijna 10% zou in een verzorgingshuis opgenomen willen worden. De ervarings-indicatoren blijken wederom sterk bepalend voor een preferentie voor professionele of informele hulpverlening. Met betrekking tot de individuele en sociale kenmerken blijkt dat de 'zwakkere' ouderen een sterkere voorkeur voor professionele hulpverlening laten zien. Factoren als een laag welzijnsniveau, een slechte mentale gezondheid, weinig sociale steun, wonen in een aangepaste woning en een slechte fysieke gezondheid blijken positief gerelateerd aan de voorkeur voor professionele thuiszorg en intramurale zorg.
In hoofdstuk 4 worden de attitudes ten aanzien van hulpverlening toegevoegd aan de factoren die van invloed zijn op de ontwikkeling van preferenties. De onderzoekspopulatie in de studie die in dit hoofdstuk wordt beschreven, betreft dezelfde als die in hoofdstuk 3. De attitudes werden gemeten door middel van een schaal 'ontvankelijkheid ten aanzien van informele hulpverlening' bestaande uit 8 items die de domeinen autonomie, zorgplicht, financiën en de kwaliteitsconcepten beschikbaarheid en bejegening beslaan. Eerst werd nagegaan of er een relatie bestaat tussen de attitudes van de respondenten en hun preferenties. Vervolgens werd opnieuw een determinanten analyse uitgevoerd, waaraan de attitude ten aanzien van het krijgen van hulp wordt toegevoegd. Tussen de attitudes ten aanzien van hulpverlening en de preferenties van de respondenten is een sterke relatie

waargenomen. Naast de individuele en sociale kenmerken en de ervarings-indicatoren blijken de attitudes van ouderen een sterke voorspellende waarde voor de voorkeuren voor hulpverlening te hebben.
Een deel van de respondenten uit de representatieve steekproef die in de hoofdstukken 3 en 4 is beschreven, werd na 1 jaar opnieuw benaderd om deel te nemen aan het vervolg-onderzoek dat in hoofdstuk 5 aan de orde is. Alleen respondenten die in het eerste interview aangaven moeite te hebben met meer dan vier ADL-activiteiten (activiteiten van het dagelijks leven), kwamen in aanmerking voor het vervolgonderzoek. Aan 458 hulpbehoevende ouderen werden na 1 jaar opnieuw de preferentie-vraagstukken voorgelegd. De ontwikkeling van de preferenties gedurende het jaar werd allereerst beschreven. Daarnaast werd het effect van statische en dynamische individuele en sociale kenmerken, ervarings-indicatoren en de attitudes op deze ontwikkeling nagegaan. Gedurende het jaar is de preferentie van de respondenten verschoven in de richting van professionele thuiszorg en intramurale zorg. De determinanten analyse maakt duidelijk dat deze verschuiving grotendeels op het conto van veranderingen in de 'ontvankelijkheid ten aanzien van informele hulpverlening' kan worden geschreven.
In hoofdstuk 6 worden een kwalitatieve en een kwantitatieve analyse gegeven van de evaluatie criteria die ouderen hanteren ten aanzien van de vorming van preferenties. Voor deze studie werden ouderen in potentiële acute of chronische hulpbehoeftesituaties geselecteerd. Acht ouderen werkten mee aan een kwalitatief interview waarbij aan de hand van een topiclijst zoveel mogelijk informatie werd achterhaald ten aanzien van de respondents preferenties en evaluatie criteria voor lange termijn hulpverlening. Voor de kwantitatieve analyse waren gegevens van 17 ouderen met een potentiële acute hulpbehoefte en 59 ouderen met een potentiële chronische hulpbehoefte beschikbaar. Het kwalitatieve onderzoek resulteerde in 29 evaluatie criteria welke enerzijds positieve aspecten van informele danwel professionele hulpverlening belichten en anderzijds juist negatieve aspecten benadrukken van deze beiden typen hulpverlening. Uit deze 29 evaluatie criteria werden 15 evaluatie criteria gedestilleerd die het gehele spectrum besloegen dat was genoemd. Vervolgens werden deze 15 criteria als mogelijkheden in de kwantitatieve studie aan de respondenten voorgelegd en werd hun gevraagd de meest belangrijke voor hun keuze aan te wijzen. Een goede relatie met informele hulpverleners blijkt bijna een voorwaarde voor een preferentie voor informele hulpverlening. Het niet willen belasten van bekenden en een positieve ervaring met ditzelfde type hulpverlening zijn de belangrijkste redenen om voor professionele hulpverlening te kiezen. Positieve ervaringen en keuzevrijheid waren belangrijke criteria in het voordeel van particuliere hulpverlening.
In de studie die in hoofdstuk 7 wordt gepresenteerd zijn zowel de evaluatie criteria die ouderen hanteren voor het maken van een keuze als de determinanten die voor het ontwikkelen van preferenties gelden, gemeten. In het kader van deze studie werden 608 ouderen van 65 jaar en ouder met een matige hulpbehoefte, geïnterviewd. Het doel van de studie was enerzijds zowel de evaluatie criteria ten aanzien van als de determinanten van preferenties te beschrijven en anderzijds beide concepten te vergelijking om na te gaan of

er belangrijke overeenkomsten konden worden gesignaleerd. Uit de determinanten analyse blijken de attitudes van ouderen ten aanzien van hulpverlening de belangrijkste. De evaluatie criteria die ouderen als belangrijk classificeren geven het belang van de attitudes eveneens aan en zijn bovendien gedetailleerder. Ook het belang van positieve ervaringen met hulpverlening blijkt zowel uit de determinanten analyse als uit de belangrijkste evaluatie criteria. Ten aanzien van de individuele en sociale kenmerken zijn de overeenkomsten minder significant.

Bovengenoemde studies tonen, met name wanneer verschillen in studie populaties in ogenschouw worden genomen, een grote mate van vergelijkbaarheid met betrekking tot de voorkeuren voor hulpverlening en de determinanten en evaluatie criteria die werden vastgesteld. Zowel de determinanten als de evaluatie criteria werden verondersteld de ontwikkeling van de preferenties van ouderen te verduidelijken. Aan de hand van de determinanten analyse kunnen factoren worden onderscheiden die van invloed waren op de vorming van preferenties. Het vaststellen van de evaluatie criteria maakt duidelijk dat deze de reeds vastgestelde determinanten overlapten. Echter, de evaluatie criteria vullen de determinanten analyse aan doordat deze een meer gedetailleerd en genuanceerd beeld geven van de aspecten die ouderen belangrijk achten bij het maken van een keuze ten aanzien van hulpverlening.

In de discussies van de hoofdstukken 2 tot en met 7 en in het afsluitende hoofdstuk 8 worden de resultaten van de verschillende studies besproken in het licht van recente ontwikkelingen in de Nederlandse ouderenzorg. Geconcludeerd kan worden dat de introductie van het persoonsgebonden budget een goede stap in de richting van de emancipatie van ouderen is. Dit budget stelt ouderen in staat zelf het type hulpverlening te kiezen dat zij wensen. Informatie over preferenties van ouderen voor hulpverlening zou echter ook gebruikt moeten worden voor het plannen van toekomstige voorzieningen voor ouderen. Allereerst is dergelijke informatie nuttig voor het vaststellen welke faciliteiten zouden moeten worden uitgebreid teneinde voorzieningen nauwkeurig af te stemmen op de wensen van ouderen. Op basis van dezelfde informatie zou de overheid bovendien kunnen besluiten om met behulp van specifieke maatregelen een poging te wagen om de preferenties voor hulpverlening te modificeren. Al deze activiteiten vereisen echter gedetailleerde en recent bijgewerkte informatie over voorkeuren voor hulpverlening en de determinanten hiervan.

Dankwoord

Gedurende de totstandkoming van mijn proefschrift heb ik van veel mensen aandacht en steun ondervonden. Sommige van hen wil ik graag met name noemen.
In het voorjaar van 1992 stelde Frans Rutten (promotor) mij voor om het preferentie-project, waarvan Robbert Huijsman (co-promotor) projectleider was, uit te gaan voeren. Het leverde Robbert een werkkracht en mij een promotieonderzoek op. Sindsdien heeft Frans steeds de randvoorwaarden geschapen waarbinnen mijn proefschrift tot stand heeft kunnen komen.
Gedurende het gehele promotie-traject heeft Robbert een zeer belangrijke rol gespeeld. Het enthousiasme waarmee hij tijdens onze wekelijkse bijeenkomsten nieuwe ideeën lanceerde of gelieerde activiteiten aankondigde, was vaak aanleiding voor mij om weer met goede moed aan de slag te gaan. Soms moest ik hem er met de haren bij slepen vanwege zijn overvolle agenda, maar als het er op aankwam, kon Robbert enorm veel regelen.
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Curriculum Vitae

Gina Wielink werd geboren op 11 november 1967 in Genemuiden. Na het behalen van het Atheneum diploma aan de scholengemeenschap 'Jan van Arkel' in Hardenberg, begon zij in 1986 de studie Gezondheidswetenschappen aan de Katholieke Universiteit Nijmegen. In 1990 behaalde zij het doctoraal examen in de richting Epidemiologie. Na een korte aanstelling bij het Nijmeegs Huisartsen Instituut was zij vanaf 1991 als wetenschappelijk onderzoeker verbonden aan het instituut Beleid en Management Gezondheidszorg, een onderdeel van de Erasmus Universiteit Rotterdam. Naast een aantal projecten dat voor het institute for Medical Technology Assessment werd uitgevoerd, begon zij in 1992 aan het project dat onderwerp is van dit proefschrift. Momenteel werkt zij als wetenschappelijk onderzoeker bij de afdeling Medical Technology Assessment van de Katholieke Universiteit Nijmegen.