The preference policy:

Implications for patients

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Foreword

This is it, my final thesis. Writing it has not been easy. Due to my own self-confidence it could even be seen as a struggle. However, looking back at this six month period, it gave me more pleasure than expected. I still love the topic and truly believe that my study has been useful to some extent. Furthermore, I also believe that it taught me a lot about doing research. Things I thought I knew, but turned out to be more difficult in practice.

There are many people whom I would like to thank for the way they contributed to my thesis. First of all, I would of course like to thank my supervisors. Much of what I have learned while writing my thesis stems from their feedback. Furthermore, they have been nothing but kind and supportive when dealing with my stress related issues. No matter how busy they were. I loved the fact that I could write it at the NIVEL. It gave me a chance to experience this company and my fellow interns brought a lot of pleasure during the days I worked there. Also for this opportunity I must thank my supervisors. I would also like to thank the pharmacists that contributed to this study by being interviewed and/or helping with the selection of respondents. Without them, this study would not have been possible. The same, of course, counts for all my respondents. They have been very open about their personal situation, something I do not take lightly and for granted. The last group of people I would like to thank are my friends and family. They have had to listen to a lot of whining and complaining from my site. They are probably used to this after five years of study, but still. Without their moral and sometimes content related support I probably would not have been able to finish this with a positive state of mind. Something, I definitely do now.

Summary

Background: As an attempt to reduce the expenditures on pharmaceutical care in the Netherlands, the preference policy was introduced in 2005. This policy allows health care insurers to determine which brand of a certain medication they reimburse based on price, and to adjust this preferred brand every 6 to12 months. To achieve a preferred status, the pharmaceutical companies thus have to compete on price, which eventually leads to a reduction of the pharmaceutical costs for the health care insurers. Although there are definite advantages of the policy for the health care insurers and the government, the policy potentially has negative consequences for others in the system, particularly for patients. Until now, however, little attention has been paid to the implications of this policy for the patients.

Objectives: The aim of study was to investigate the consequences of the preference policy for patients. More specifically, attention was paid to the potential consequences: experienced changes, medication management, pharmacist-patient relationship, patient satisfaction, and beliefs of medication efficacy.

Methods: The study is cross-sectional and explored the topic through qualitative interviews with 19 patients with cardiovascular disease (CVD). Inclusion criteria were chronic medication intake for CVD since before January 2008, insured at a health care insurance company with the preference policy, responsible for own medication management, and ability to be interviewed in Dutch. Eligible patients were approached through pharmacies in three different municipalities. The interview strategy was semi-structured, starting with open questions followed by some leading questions on the potential consequences in the specific research questions. The interviews were transcribed and then coded. The coding scheme consisted of constructed and in-vivo codes. A second coder checked the comprehensiveness of the coding technique after the first two interviews were coded.

Results: The interviews revealed that changes in the appearance of pill boxes or pills and side effects were the most often experienced changes. With regard to medication management, patients did not perceive that their routines were disturbed in the sense that they were making more mistakes, but the effort to maintain their routines did increase. Especially among older patients that were using six or more prescribed drugs a day, this appeared to be a problem. For the large majority of the respondents, the pharmacist-patient relationship, patient satisfaction, and medication efficacy beliefs were not affected. This could either be contributed to the level of communication on the brand changes or to the efficacy of the medication. Furthermore, no clear relationship was found between the consequences a patient experienced and his or her attitude towards the policy.

Conclusions: The main consequence experienced by patients following the introduction of the preference policy is an increased effort to maintain routines of medication intake. How the consequences are valued with regard to the purpose of the policy varies. Overall, the consequences are thus acceptable, but on the individual level they should still be prevented or at least minimized.

Contents

1. Introduction

1.1 Background and problem statement

Like in many developed countries, the health care system in the Netherlands has been dealing with increasing expenditures over the years, which are expected to increase even more with the ageing society (Bech, Christiansen, Khoman, Lauridsen & Weale, 2010). These increasing health care costs have worked as an incentive among policy makers and health care insurers to think of ways to control the expenditures, without causing adverse health effects (Aaserud et al., 2009; Schäfer et al., 2010). One of the areas where cost controlling policies have been implemented is the pharmaceutical care sector. With a share of approximately 11% of the total health care costs in the Netherlands, the pharmaceutical care can be seen as one of the major cost components (OECD, 2010; van Kappen, 2010). In addition, the yearly costs of pharmaceutical care have increased with 2617 million euros between 1998 and 2007 (i.e., from 3363 to 5980 million euros; Schäfer et al., 2010).

The central topic of this study is the in 2005 implemented preference policy, one of the policies that have been introduced in the Netherlands to control the rising pharmaceutical costs (Schäfer et al., 2010). The preference policy reduces the expenditures by allowing the insurer to only reimburse one drug, often the cheapest, of a group of similar generic medicines[1]. So, when different brands of a certain generic medicine exist, which are all valued to have the same quality and effect, the insurer can determine a preferred producer. This means that only the preferred brand will be reimbursed by the insurer, at least, when there is no medical reason for a different brand. Which brand is given preference is determined by each individual insurer based on price agreements with pharmaceutical companies. These agreements often hold for a period of six months to a year. After an agreement has passed, the insurer determines a new preference, based on the cheapest option at that moment.

After the introduction of the preference policy, the prices of some often-used generic medicines decreased with 85% as a result of the competition that the policy induced between the producers (Griens, Tinke & van der Vaart, 2008). These price reductions are being used as an argument to say that the policy is a success. However, up until now little attention has been paid by research to gaining insight into the impact of the policy on the patients. This is problematic since, first of all, the patients' opinions are supposed to guide the Dutch health care system (Schäfer et al., 2010). The system should thus be attuned to the desires of the patients. Next to that, ever since the introduction of the policy there have been some proponents, mainly from the pharmaceutical sector (e.g. pharmacists, pharmaceutical producers), who claimed there is a potential negative effect of the policy on the patient level. They, for instance, believe that it could negatively affect the intake of medication, which could harm the patient. It is however still unclear whether this is true. It thus seems imperative to gain more insight into the experiences of the patients with the preference policy. The main research questions of this study are, therefore: *What consequences do patients experience as a result of the preference*

[1] Generics are medications developed by companies other than the original producer after the original patent expired. Because the companies that develop generics do not have enormous research and development costs, they are much cheaper than the original product (Jonas, Kovner & Knickman, 2005). For this reason, generic substitution, which stands for substituting an original brand for a generic one, has become common practice in the Netherlands and other countries over the years, with the purpose of saving money (Andersson, Bergström, Petzold & Carlsten, 2007; van Wijk, Klungel, Heerdink & de Boer, 2006).

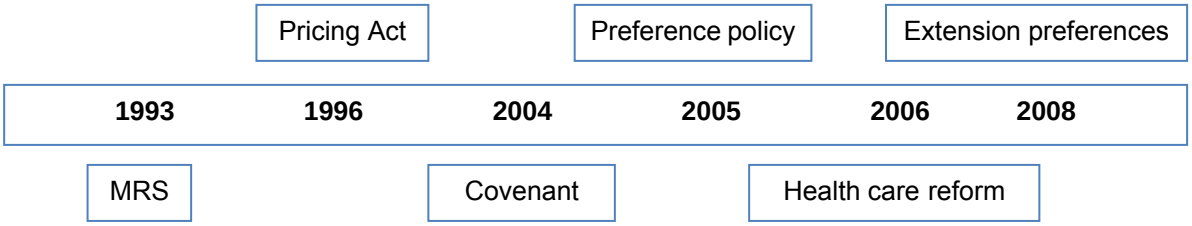
policy? And how do they value these with regard to the purpose (reducing health care costs) of the policy?

In the next section, an overview of the most relevant policy developments in the Dutch health care system of the last two decades will be provided to give an impression of the system surrounding the development of the preference policy. This will be followed by a discussion of previous studies that looked at the consequences of the preference policy for patients and other stakeholders, to show what this study can add to the current knowledge. In chapter 2, the theoretical framework for the present study will be described, resulting in the specific study objectives. This chapter will be followed by the chapters on the research methods used, the results, the discussion, the strengths and limitations of the study, the recommendations, and the overall conclusion.

1.2 The preference policy and the Dutch health care system

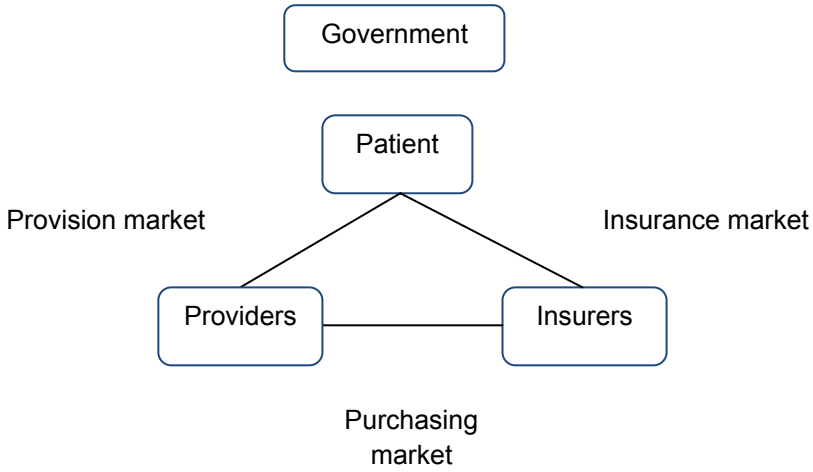
The preference policy can be seen as one of several attempts to reduce the pharmaceutical costs in the Dutch health care system. In the last two decades, it has been preceded by a number of policies with the same goal (Figure 1). In 1993, the Medicine Reimbursement System (MRS) was introduced, a system that uses reference pricing to set a reimbursement limit for groups of equivalent pharmaceuticals (Schäfer et al., 2010). In 1996, the Pricing Act was introduced, which continued with the principle of reference pricing by setting maximum prices based on the prices in the reference countries Germany, Belgium, France, and the United Kingdom. Finally, since 2004, the Ministry of Health, Welfare and Sport, pharmacists, and producers of generic medicines have started to arrange yearly price negotiations, in the form of a covenant. During these negotiations, agreements are made on, for instance, the prices of medication and the use of generics.

Figure 1: Overview policy developments



The Dutch health care system has however not only been adjusted by policies with the sole purpose to reduce the costs. In 2006, a health care reform took place, which completely changed the position of the government in the system (Schäfer et al., 2010). No longer is the system regulated by the government, but managed competition between actors in health care has become the central regulatory mechanism. As a result, much of the government's tasks have been delegated to the three, now most important, actors in the health care system; the patient, the provider, and the health care insurer. The government remained responsible for the affordability, quality, and accessibility of care, and sets the rules. The patients, health care insurers, and health care providers now together determine the volume, prices, and productive capacity of care delivered by interacting on three different markets (Figure 2).

Figure 2: Actors and markets in the Dutch Health care system since 2006



Source: (Schäfer et al., 2010)

When looking back at the different policies that attempted to reduce the pharmaceutical costs, this role change also becomes visible. With the MRS and the Pricing Act, the set reimbursement limits are mainly determined by the government, where the in 2004 started covenants, seem to already move towards a system in which also the providers have a say. When the preference policy was first introduced in 2005, a list of preferred brands for the three often-used generic substances Omeprazol (gastric acid), Simvastatine (high cholesterol) and Pravastatine (high cholesterol) was set (Schäfer et al., 2010). This first list was the same for all health care insurers, meaning that they all only had preferences for these three substances. In this phase, the insurers thus only had limited autonomy with regard to the execution of the policy. With the reform in 2006, however, the insurers gained more freedom, allowing an extension of the preference policy in July 2008. Ever since, the insurers no longer have to take part in the collective list and are allowed to set their own individual list of preferred generic medication. This resulted in an expansion of the amount of pharmaceuticals under the preference policy, because the insurers no longer were limited to the three generic substances that were already on the list.

It must be noted that the way the preference policy is supposed to reduce the expenditures on pharmaceuticals promotes managed competition, the regulatory mechanism of the reformed health care system. For instance, the idea behind the preference policy is that pharmaceutical companies are forced to compete on price, which results in lower prices and thereby in lower pharmaceutical costs. Furthermore, these lower costs allow insurers to minimize the growth of the premiums, which enhances the competitive position of the insurers.

Hence, the preference policy can be considered as a product of the different developments the Dutch health care system has gone through. Considering the idea of managed competition, the policy fits within the current system.

1.3 Previous research on the consequences of the preference policy

After the introduction of the preference policy, a limited amount of studies have been directed at the consequences of the policy for others than the health care insurers. Van Kappen (2010), for example, studied the impact of the preference policy on pharmacists, wholesalers, and suppliers by using two studies of Atos Consulting for which pharmacists and 35 other experts in the health care sector were interviewed. According to van Kappen (2010) many pharmacists got into financial problems due to the policy, because more time needs to be spend on patient care and logistics and less money is earned on the medication. This resulted in merges between different pharmacies. Furthermore, the wholesalers had to cut back on their level of service offered due to lower incomes. For the suppliers, the policy supposedly led to a fifty percent turnover decrease because of a lower margin on the pharmaceuticals. In addition, it is assumed that it resulted in lower quality medicines due to the growth of the market for suppliers from low-income countries, of which the medicines cannot be controlled on quality as much as usual. Hence, it seems the preference policy has had a negative impact on these stakeholders.

Based on these findings, van Kappen (2010) argues that the patient could also be affected or even harmed by the policy. For instance, patients may have longer waiting times before they get their medicine or they may get a longer travelling distance between their house and the pharmacy due to the decreasing number of pharmacies. Additionally, he argues, patients may receive lower quality medicines or medicines that do not completely fit their needs, which has to do with the import of medicines from low-wage countries where quality control is assumed not to be up to the Dutch standards. Moreover, he argues that some brands could be better on the individual patient level than other brands due to the type of pharmaceutical excipients, which are supportive ingredients, used in medicines besides the main active molecules. This could, for instance, mean that a patient experiences side effects with one brand but not with another. Furthermore, because the medication might change with respect to physical appearance every 6 to 12 months, patients might be uncertain about which medication to take and how often. This last consequence could result in mistakes in medication intake, especially among people that are on a complex regimen (e.g. elderly, chronic patients). So, according to van Kappen (2010), there is reason to believe that the preference policy might have negative consequences for the patient. These are all, however, assumptions, since he did not collect data at the patient level.

In 2008, the Dutch research institute NIVEL did a consumer panel (n = 934) study that included questions on the preference policy and its consequences for the patient [2]. The results showed that 40% of the respondents had not received any information on the policy. For the people who did receive information, the pharmacist (32.8%) and the health care insurer (21.5%) were the main sources of information. Overall, people agreed with receiving a cheaper brand of a certain medicine on the condition that it would be qualitatively the same as their previous medication. The majority of the participants (76.2%) felt that the policy should result in benefits through lower premiums for health care insurance. On the statement that health care insurers should reimburse both cheaper and more

[2] Results not yet published

expensive versions of the same type of medicine, about 55% agreed. Of the respondents that already experienced a change in medication (n=220, 23.6%) due to the policy, 70.6% did not have any problems with this, 17.9% were slightly bothered, and 11.5% experienced it as a big problem. The main reasons mentioned for problems were new side effects, changing appearance of the medication (e.g. color of the pills, the package), the perception that the medication was less effective, bad communication about the brand changes, not having the possibility to choose between medicines, and a decreased user friendliness due to changed packages and/or pills. This study thus shows that about one-third of the patients who participate in this online panel experienced some problems with the policy.

A final study that has been conducted on the impact of the preference policy was conducted by the Dutch Patient Consumer Federation (NPCF). The NPCF has done two questionnaire studies on patients' experiences with, and opinions about the preference policy in 2008. The first was done among 1695 respondents. Of this group, 67% of the respondents experienced a brand switch due to the preference policy, of which 46% claimed to have had a problem as a result of this. The second study included 5136 respondents, of which only 47% experienced a brand switch. Here, 36% of the respondents who experienced a switch claimed to have problems with this. Again, both studies showed that when people perceived the policy as causing problems, this was due to changes in side effects, the perception that the new medication was less effective, allergic reactions to the new medicines, a decreased ease of use due to changes in packaging, pill color and pill form (NPCF, 2008; Lekkerkerk & van Batenburg, 2009). These findings thus confirm the results of the NIVEL study with regard to the causes of the problems.

In sum, research that focused on the experiences of the patients with the preference policy found that between 30% and 45% of the patients receiving other brands, experienced problems with it. Furthermore, the studies showed that there are various causes for these problems. Hence, they signal that patients experience a notable, negative impact of the policy. However, these studies also have several important limitations. Mainly, it are all questionnaire based studies with a limited set of response options, so that it is impossible for the respondents to bring any nuance in their answers or bring forward issues that have not been included in the questionnaires. Furthermore, the results only show why people experienced problems with it, but it is unclear what the exact consequences are. Hence, although studies suggest there is a problem with the implementation of the policy at the patient level, the full spectrum of possible implications has not been mapped in detail so far.

The aim of the present study is to obtain a more detailed image of the consequences of the preference policy for the patients through qualitative interviews with patients affected by the policy. For this purpose, first a comprehensive theoretical framework was designed.

2. Theoretical framework

This chapter discusses literature that may be relevant in relation to the topic under study, resulting in the specific research questions of this study. In addition, four informal elicitation interviews were conducted with pharmacists (Appendix I) of which the results have been integrated in this chapter.

2.1 Experienced changes

From literature and the four interviews with pharmacists on the effect of the preference policy on the patient level, some visible or even tangible changes as a result of the policy that could be noticed by patients can be distinguished. First of all, the time between filling a prescription and receiving the medication could have increased. One reason for this is that the pharmacists and distributors have a hard time with stocking and delivery of the different preferences, which could result in a brand not being available when the patient comes by. In such cases, it is often necessary to ask the patient to come back another day. These logistic problems occur because all stakeholders (pharmacist, supplier, wholesaler) in the distribution chain are afraid of buying large amounts at once because of the risk of not being able to sell after a change of preference by the health care insurance company. Furthermore, it is claimed that waiting times within the pharmacies increased. This has to do with the fact that more explanation is needed when patients come to pick up their medicines after a preference changed. The potentially higher time costs of picking up medication could be seen as a negative effect of the policy by the patients.

Another difference that patients might notice is that the physical appearance of the medication they use keeps changing with the changing brand (i.e., different looking box and/or a differently shaped or colored pill). This could result in confusion and medication errors. Furthermore, it was mentioned by pharmacists that it could be that people are confused by it because they do not understand that the new yellow pill is a substitute for the old white one. This could also result in mistakes in medication intake. Such mistakes could harm the patient's health due to for instance a decreased drug efficacy or treatment failure when a medicine is forgotten (Balkrishnan, 1998). Hence, it is important to know if and how people experience such changes in drug and package appearance.

The changing brands could in some cases also lead to side effects like headaches and rashes, meaning that in some cases people might be fine with one brand but develop a side effect when using another brand. A possible explanation for this could be a difference in pharmaceutical excipients between different brands. Whether a patient gets a side effect due to the pharmaceutical excipients is unpredictable since it depends on genetic factors of the patient (Pirmohamed & Park, 2001). According to the pharmacists that were interviewed, it happens quite frequently that people come back with complaints of side effects after receiving a different brand. The pharmacists were, however, a bit sceptical about the cause of this and claimed that it is more likely that it has something to do with psychological factors, than the pharmaceutical excipients. Be this as it may, if the changing brands truly lead to an increase in the incidence of side effects, or that this is just a patient perception, in both cases this is a problem. Not only because it physically harms the patient, but it could also lead to an increased utilisation of health services (e.g. extra GP appointments to solve the problem) or patients deciding to reduce or even stop the use of the medication (Osterberg & Blaschke, 2005).

A fourth change that might be noticed by patients has to do with the fact that the preferences sometimes also concern the medication dosage. For instance, the insurer can decide to only reimburse pills with a certain dose (e.g. 80 mg), which results in people having to break them themselves when they have been prescribed to take a different dose (e.g. 40 mg). Another example is that the insurer decides to only reimburse painkillers in the form of a tablet and no longer in forms that are easier to swallow, like effervescent powders. These preferences could be seen as decreasing the

suitability of medicines for certain people. So, the fourth possible change is that in some cases patients receive less suitable medicines, which could make it more difficult or even impossible for them to take their medicine in the prescribed way. This possibly reduces the effectiveness of the treatment through suboptimal or interrupted medication use, which could lead to worse health and dissatisfaction with the treatment (Balkrishnan, 1998; Ware, Snyder, Wright & Davies, 1984).

Finally, the pharmacists that were interviewed mentioned that the chance of mistakes by the employees of the pharmacy increased with the introduction of the policy. This has to do with the fact that the policy requires an additional action of the pharmacist when selecting medication for the patient. First, they only needed to make sure they delivered the right type of drug and the right dose. Now, they also need to make sure that they provide the right brand for the patient. Even though they said this did not lead to any harm yet, they did regard it as a potential problem. According to the pharmacists, their mistakes could have several consequences. In case a mistake is made on the type of medicine, the patient might be harmed by taking the wrong drug. It could however also be that the wrong brand is provided, which could result in stocking problems at the pharmacy, a patient not being able to get the medication reimbursed, and the additional activity required could result in longer waiting times.

Some of the concrete implications discussed here are comparable to the problems experienced with the policy that have already been identified by the studies of NIVEL and the NPCF in 2008. The issues addressed with the specific questions introduced in the next paragraphs will go beyond these tangible implications.

2.2 Medication management

As van Kappen (2010) argued, supported by the ideas of some of the pharmacists that were interviewed, the preference policy could potentially influence the intake of medication. When having a disease that requires treatment, it is very important to properly adhere to the prescribed regimen if one wishes to stay as healthy as possible (Horne & Weinman, 1999). Medication adherence is the concept that stands for the extent to which a person takes his or her medicines in the way it was agreed upon with the physician (Osterberg & Blaschke, 2005). So, whether the patient takes “the right drug in the correct dose at the right interval” (Barat, Andreasen & Damsgaard, 2001, p. 615). In case of patients with a chronic illness, this is often referred to as medication management. People with chronic illnesses develop routines for medication management to maintain control over everyday life and to be adherent (Haslbeck & Schaeffer, 2009). The maintenance of such routines is, however, complicated by factors like new medications and side effects. This has to do with the factors that influence the development and maintenance of routines. First of all, part of the routine behavior is based on automatic processes in the form of habits which are often linked to environmental cues (Reach, 2004; Wu et al., 2008). An example of such an environmental cue would be the packaging of the medication. So, when this changes the automatic processes might be disturbed. Furthermore, the development and maintenance of routines requires a motivation to be adherent. One important determinant of this motivation is a person’s self-efficacy, which stands for the beliefs about one’s own capabilities (Bandura, 1997). According to the theory of self-efficacy, emotional arousal, as can be caused by insecurity and fear, can diminish one’s self-efficacy and by that affect the initiation and persistence of

coping behavior like maintaining routines. New medications, which includes a different brand with a different package, could cause insecurity or fear about which medication should be taken and whether no mistakes are made. Hence, it could decrease a person's self-efficacy, which results in a lower motivation. Another factor that influences motivation is the outcome expectation (Bandura, 1997). A negative outcome expectation, for instance, declines the motivation to act. Side effects could cause such negative expectations. When one, for instance, experiences side effects, more disadvantages are seen, which could make a person less motivated.

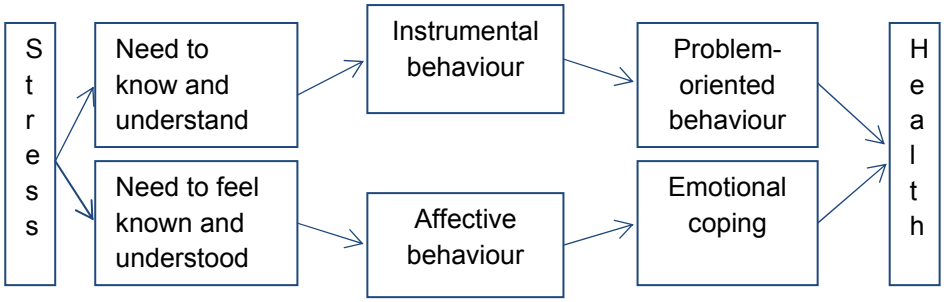
Hence, various explanations can be given for the potential impact of the policy on the maintenance of medication routines. Considering the importance of medication adherence it is thus necessary to study whether patients believe that their routines have been disturbed by the preference policy. Disturbance in this case refers both to making mistakes and thus non adherence, and an increased effort to maintain the routines.

2.3 Pharmacist-patient relationship

During the interviews with the pharmacists it became evident that they felt like some patients were frustrated with them due to the changing medications, leaving hardly any opportunity to properly inform the patients on their medication intake, a responsibility that they have in addition to merely providing the medication (Worley, 2006). For the outcome of the treatment it is very important that the patients receive proper information on their medication intake. This has to do with the role of information on proper intake in medication adherence (Clifford, Barber & Horne, 2008). As a result of this, a poor provider-patient relationship is considered to be one of the risk factors of medication non-adherence (Osterberg & Blaschke, 2005; Touchette & Shapiro, 2008; Julius, Novitsky & Dubin, 2009).

Bensing and Verhaak (2004) developed a model that illustrates the needs of the patient, the required response of a doctor, and the outcome of the response (Figure 3). The basic premise of this model is also applicable to the role of communication within the relationship between the pharmacist and the patient. The pharmacist should, for instance, not only provide information on the medication (instrumental), but should also express sympathy and understanding towards the patient (affective), both of which are of influence on the way the patient deals with the disease, and thus medication adherence. By revealing what the relationship between the pharmacist and the patient looks like, this model helps us understand why the quality of the relationship is important. For this understanding, it should be noticed that between providing help by the pharmacist and receiving help by the patient, acceptance of help by the patient takes place. Such acceptance is assumed to require a good relationship, because without this the patient could decide to ignore the advice of the pharmacist (van Dulmen et al., 2007). The quality of the provider-patient relationship depends on two factors. These are trust and patient satisfaction (Crosby, Evans & Cowles, 1990; Worley-Louis, Schommer & Finnegan, 2003), factors that are also influenced by the communicative behavior of the pharmacist.

Figure 3: Provider-patient communication from a stress-coping perspective



Source: Bensing & Verhaak (2004)

Patients base their trust on five different dimensions (Hall, Dugan, Zheng & Mishra, 2001; Ngorsuraches et al., 2008). *Fidelity* stands for pursuing the patient's best interest. To show fidelity one must be caring, respectful, advocating, and avoiding conflicts of interest. The second dimension, *competence*, stands for avoiding mistakes and reaching the best possible result. Because it is hard for patients to measure the actual technical competence, the competence evaluation is often heavily based on communication skills. *Honesty* includes telling the truth and avoiding falsehoods. The fourth dimension, *confidentiality,* stands for the protection and proper use of patient records. *Global trust*, the fifth dimension, includes all other concerns that do not fit within one of the other dimensions or cannot be categorized at all. The instrumental and affective communicative behavior of the pharmacist influences the different dimensions of trust. The level of trust in a provider's fidelity is, for instance, determined by acts of affective behavior, and the evaluation of one's competence is based on the way instrumental aspects of the treatment are communicated by the provider.

The preference policy might have affected the level of trust in the pharmacist, and with that the relationship between the pharmacist and the patient. The most reasonable explanations for this are changes in trust on the dimensions fidelity and competence. With regard to fidelity it could, for instance, be that patients think that the pharmacists and insurers try to earn more money by providing them cheaper drugs. Trust in competence could decrease when mistakes are made more often, something the pharmacists indicated as a possible outcome of the policy. Furthermore, it could be that patients perceive the occurrence of side effects as mistakes of the pharmacist. If this is the case this could also harm the trust in competence.

Patient satisfaction is the second factor that influences the provider-patient relationship (Worley-Louis et al., 2003). It is very much related to trust, but where trust is a forward looking evaluation of a relationship, satisfaction looks at past events (Hall et al., 2001; Thom, Hall & Pawlson, 2004). Satisfaction is influenced by the evaluation of differences or similarities between a person's expectations and the actual experience (Panvelkar, Saini & Armour, 2009). In case of a patient's satisfaction with the pharmacist and his services, the evaluation of actual experiences is based on the factors pharmacist attitude, medication availability, convenience, pharmacy facilities, location, and prescription fill waiting time (Panvelkar et al., 2009). Here, mainly the factor perceived pharmacist attitude is assumed to be influenced by the pharmacist's communicative behavior. Considering the five noticeable changes for the patient with the introduction of the preference policy (see chapter 2.1), it could be that patients' satisfaction with the pharmacist declines due to, for example, longer waiting

times and less suitable medication. All of which could result in a changed relationship between the pharmacist and the patient.

Patient satisfaction is by itself also an important indicator of quality of care (Biderman, Noff, Harris, Friedman & Levy, 2009; Jackson, Chamberlin & Kroenke, 2001), a factor that cannot be neglected when evaluating the impact of a health care related policy. Here, it is not just about the satisfaction with the care received from the pharmacist, but about the satisfaction with all care received. This broader type of patient satisfaction is typically based on an evaluation of multiple components of the medical care provided including, interpersonal manner, technical quality, accessibility/convenience, finances, efficacy/outcomes, continuity, physical environment, and availability (Ware et al., 1984; Sitzia & Wood, 1997). As can be seen, these components partly overlap with the factors where patients base their satisfaction with the pharmacist and his services on. Important differences are the factors related to the quality, efficacy, and outcomes. Factors that are also more connected to the actual care received, which in this study mainly refers to the medication.

Since the quality of the provider-patient relationship influences medication adherence, and by that the treatment outcome (Worley, 2006; Neuman et al., 2010), it can be argued that maintaining a good relationship between the pharmacist and the patient is important. So, if the patient-pharmacist relationship is disrupted by the preference policy, this could be seen as harmful. Hence, it is important to investigate whether the patient perceives the relationship to be changed with the introduction of the policy.

The importance of patient satisfaction with regard to the quality of care makes this a topic to pay specific attention to. For this reason, it is also essential that the impact of the preference policy on patient satisfaction is explored.

2.4 Medication efficacy beliefs

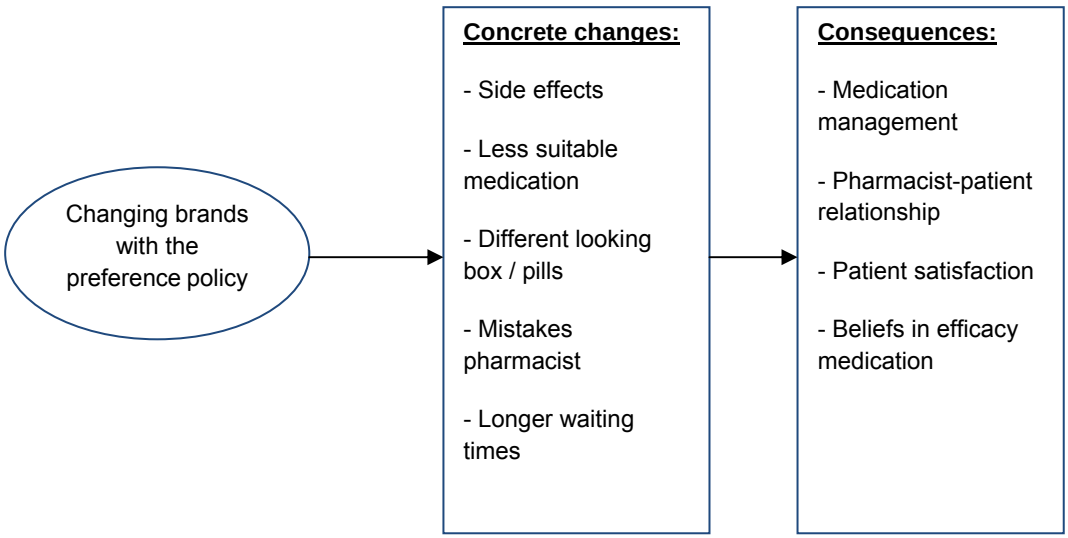
The studies of NIVEL and the NCPF in 2008 both showed that some patients had experienced problems with the policy due to a lower efficacy of their medication. In addition, one of the pharmacists indicated that some patients ask for the original brand and do not like it that only a generic brand is reimbursed. This has, according to the pharmacist, to do with the belief of patients in the effectiveness of the generic brands. They think that generic brands are less effective than the original brands. This idea is not completely unrealistic. Research has shown that price discounts are of influence on the effect of placebo medication (Waber, Shiv, Carmon & Ariely, 2008). In an experiment the effect of a placebo pain killer, which was actually just a vitamin c pill, was tested in a group that was told it costs $2.50 and a group that was told it was discounted to 10 cents. The participants were subjected to electric shocks to induce pain before receiving the pill and after. Of the participants who had been told that the pill costs $2.50, 85.4% experienced a pain reduction after receiving the pill. Only 61% experienced this is in the discounted price group. Based on these results it is concluded that price reductions decrease the experienced affectivity of placebo pills. The authors (Waber et al., 2008) believe this mechanism might also work with real therapeutic medication. So, they say lower prices might reduce the therapeutic efficacy especially where placebo responses play a role as well. An explanation for this is that price might influence patients' expectations, which play an important role in the placebo effect.

Even though there is no prove that this principle also holds for regular medication, simply because for a lot of medicines the exact role of the placebo effect is not known, it is interesting to study if the price reductions with the preference policy have affected the perceived efficacy of medications. It will not be possible to test the true efficacy, but the beliefs of the patient with regard to the efficacy of medication can be examined. Since the patient's expectations, which are based on beliefs, are regarded as influential on the true efficacy (Neuman et al., 2010), it could be argued that when patients believe that the medicines they get since the introduction of the preference policy are less effective, the true efficacy is less as well. This mechanism of negative expectations is also known as the nocebo effect (Haga, Warner & O'Daniel, 2009).

2.5 Specific research questions

To summarize the points to be studied, Figure 4 gives an overview of the possible consequences of the preference policy on the patients. It shows the expected direct changes noticed by patients because of the changing brands, both at the level of the medication itself and at the organizational level of the pharmacies. Furthermore, it shows what these concrete changes are thought to influence.

Figure 4: Theoretical model



This has resulted in the following specific research questions:

1: What concrete changes (i.e., waiting times, side effects, appearance of the box/pills, suitability of the medication, pharmacy mistakes) have been experienced by patients after the introduction of the preference policy?

2: To what extent do patients believe that their daily routines of medication intake have been disturbed as a consequence of the preference policy?

3: To what extent have patients experienced a change in their relationship with the pharmacist as a result of the preference policy?

4: To what extent has patient satisfaction changed with the introduction of the preference policy?

5: What beliefs do patients have of the efficacy of the medication they receive?

These research questions can probably be studied best among a patient sample that has been exposed to the preference policy and the system before it was introduced, different age groups, and a variation in the number of medicines prescribed. Patients who have been confronted with the preference policy since its introduction are those receiving medication to treat cardiovascular diseases (CVD). CVD is a cluster of chronic diseases which requires a constant intake of medication (Landwehr Johan, van den Akker, Metsemakers & Buntinx, 2000). The incidence of CVD is highest among the oldest members of the Dutch population, with a strong increase after the age of 40 years (Poos, van Dis, Engelfriet & Deckers, 2010). Furthermore, people with CVD are often required to take a number of medicines. Patients who, for instance, suffer from congestive heart failure have to take cholesterol lowering medication, high blood pressure medication, blood thinners, and beta blockers (Nederlandse Hartstichting, 2010). Many of these medicines are on the preference lists of the Dutch health care insurers. Hence, if the preference policy has an impact on patients, people being treated for CVD would be very suitable to study these. This study therefore focuses on this group.

3. Research methods

The present cross-sectional study aims to explore the possible range of consequences of the preference policy on the patient level through qualitative interviews. In this chapter the research population and sampling methods, the method of data collection, and the method of data analysis used will be described.

3.1 Sampling methods

The population of this study consists of patients who take chronic medication for CVD in the Netherlands, starting medication before January 2008 (six months before implementation of the extended preference policy). Clients of Achmea (Interpolis, Zilveren Kruis Achmea, FBTO, Avero Achmea, Agis, OZF Achmea), CZ (Ohra and Delta Lloyd), Menzis, Unive-VGZ-IZA-Trias, and Zorgverzekeraar Zorg en Zekerheid were selected, since these implemented the preference policy and together cover the large majority of the Dutch population (Schäfer et al., 2010). People who could not be interviewed in Dutch were excluded. The respondents also had to manage their own medication, meaning that they should not be provided with the medication by nurses of home care or through a Baxter bag[3].

Three pharmacists helped with selecting and contacting eligible patients. The selection of the pharmacists was based on convenience sampling, but with the purpose to include pharmacies located

[3] Pharmacists often offer the service of providing the medication in so called Baxter bags. Each bag includes the medication for a specific moment of intake during the day. This way the patient for instance has a bag for the morning, the afternoon, and the evening. By taking away the burden of having to think about which medication to take when, the service is meant to improve medication adherence of patients.

in different types of areas. For this reason, the study included a pharmacy in a large city (R), a pharmacy in a small town (W), and a pharmacy in a village (B). All pharmacists helped with the selection of respondents by developing a list with clients of them based on the selection criteria of this study. Of these lists, respondents were then selected in a way that people with a maximum variation on age, sex, and number of medication used were approached. Table 1 provides an overview of the invited respondents.

Table 1: Invited respondents

	Male (n)	Female (n)	Total (n)
Pharmacy B	15	25	40
Pharmacy W 1st	12	13	25
Pharmacy W 2nd *	10	10	20
Pharmacy R	15	7	22
Total	52	55	107

* At pharmacy W, two selection waves were done due to a low response after the first wave

Initially, 25 letters were sent from pharmacy W, however, after a low response rate (2 out of the 25 invited responded), an additional 20 people were invited. The letter (Appendix II and III) included a brief introduction on the topic of the study, an application form, and the option to indicate why a person did not want to participate in the study in order to get more insight into the possible response bias. Because at pharmacy W the response was so low, in pharmacy R, participants were approached by telephone.

3.2 Data collection

For this study patients were interviewed, either at their homes or at the pharmacy. The aim was to interview between 15 and 20 respondents, depending on the level of data saturation reached after 15 interviews. This means that it was analyzed whether or not new insights would be gained from further data collection after the fifteenth interview (Bowling & Ebrahim, 2005).

The interviews were semi-structured, meaning that they were lead by a topic list with some leading questions without any response options (Bowling & Ebrahim, 2005). The initial topic list (Appendix IV) was based on the main and specific research questions of this study. The questions, the way they were asked and their order, were not fixed beforehand because this provides more space for the respondents to tell what comes to their mind (‘t Hart, Boeije & Hox, 2005). For instance, by starting with open questions on changes and consequences, the order of the topic list allowed space for new and spontaneous insights from the respondents. Furthermore, depending on the respondent’s answers, additional questions were asked to gain further insight into the specific situation, and in some cases questions were left out when it became clear during earlier questions that they were irrelevant. If patients addressed new topics that were not part of the prepared questions, additional attention was paid to these to accumulate as much information on it as possible.

In addition to the topics based on the theoretical framework, also familiarity with the policy and the attitude towards the policy were discussed during the interviews. These have been added because it is important to know whether patients are aware of the existence and content of the policy, and what their general opinion is about the policy with regard to its aim and execution. The information on familiarity with the policy is regarded as important because it provides insight into the value that should

be given to the consequences mentioned by the patients. If a respondent would, for instance, have no idea of the existence and content of the policy, consequences mentioned by him or her might not be related to it. Furthermore, the information on attitude is needed to answer the main research question on the way the people value the consequences they experienced.

After the consent forms were signed, the interviews started with questions on the respondents' background. The questions asked here were on age, sex, living situation, ethnicity, highest level of education, number of prescribed medication, and health care insurance. Next, the interview questions on the topic list were discussed, and the interview ended by asking whether the participants had any additional comments to make on the topic. All interviews were recorded using a voice recorder, making it possible to make a verbatim transcription of them afterwards for the purpose of analysis.

3.3 Data analysis

For the analysis all interviews were transcribed ad verbatim. These transcripts were then coded. The coding scheme consisted of a combination of constructed codes based on the literature and in-vivo codes based on the statements of respondents. The main categories of the coding scheme were based on the topics of the specific research questions of this study. The keywords within each category were based on factors that were mentioned in the literature in relation to the main topics. While going through the transcripts repeatedly the exact codes were adjusted based on the content of the data when necessary and appropriate. To make sure the coding was done as comprehensive as possible, the transcripts and the coding of the first two interviews were checked by a second coder. This check also functioned as a way to test whether the questions asked during the interviews were not formulated too leading. This allowed for an improvement of the interviewing techniques used at an early stage where necessary. After all interviews were coded, all data was analyzed extensively. During this analysis all statements were compared between different respondents and within respondents. The latter was done by comparing a respondents' statement with other relevant statements and the background information of the respondent. This way it was prevented that any important piece of information would be missed.

4. Results

4.1 Respondents

In total 21 people were interviewed. Two of them could not be included for analysis because the respondents turned out to have no experience with the preference policy. The final 19 interviews were held with 6 men and 13 women (see Table 2). Seventeen identified themselves as native Dutch and two belonged to the immigrant population (Turkey and Italy). One respondent did not have any education, eight finished lower education, five finished middle education, and five finished higher education. The average age was 69 years (range 46 to 83 years). The average number of prescribed drugs respondents currently use is 5.6, with a standard deviation of 2.6.

Table 2: Overview respondents			
	Male	Female	Total
Number of respondents	6	13	19
Age (mean, standard deviation)	71,5 (± 9,1)	68,6 (± 10,5)	69,5 (± 9,9)
No. prescribed drugs (mean, standard deviation)	5,7 (± 1,5)	5,5 (± 3,0)	5,6 (± 2,6)
Ethnicity:			
- Dutch	5	12	17
- Italian	1	0	1
- Turkish	0	1	1
Level of education:			
- none	0	1	1
- low	2	6	8
- middle	3	2	5
- high	1	4	5
Health care insurance:			
- Menzis	5	8	13
- UVIT	0	4	4
- CZ	1	1	2
Living situation:			
- Alone	2	5	7
- With spouse	4	7	11
- With child	0	1	1

Table 3: Overview non-respondents			
	Male	Female	Total
Number of non-respondents	45	41	86
Age (mean, standard deviation)	65,0 (± 8,9)	71,2 (± 9,9)	68,5 (± 9,7)
No. prescribed drugs (mean, standard deviation)	5,9 (± 2,1)	6,2 (± 3,0)	6,0 (± 2,6)

In Table 3, an overview of the non-respondents is given. Although 21 respondents agreed to participate, there were 86 people who did not agree to participate (either did not respond or did decline by returning the rejection form). Using logistic regression to explore whether respondents and non-respondents were comparable in terms of age, gender or the number of pills prescribed, no significant differences were observed (see Table 4).

Table 4: Analysis of predictors participation to study by logistic regression			
	B	S.E.	Sig.*
Gender	-,832	,551	,131
Age	-,010	,029	,728
No. prescribed drugs	,082	,104	,432

* Significant when p<0.01

Of the non-responders that received the invitation letter (n=69), 17 returned the sign-off form with an explanation for their non-response. Twelve indicated that they did not experience any consequences as a result of the preference policy, two were not available during the period the interviews took place, two could not be interviewed because of their disease, and two did not like interviews. From the ones contacted by phone (n=16), 12 were not interested, two did not have time, one could not be interviewed in Dutch, and one could not be interviewed because of the disease.

4.2 Knowledge of the policy

Taking into account the introduction on the topic in the invitations, the first question asked during the interviews regarding the knowledge on the policy was whether the respondent was familiar with the term “preference policy” before he or she heard about it with the invitation. Seven respondents said they were. Of these seven, five could also explain its purpose when asked for it. Two could not and claimed that despite having heard of it never paid attention to it. Of the respondents that did not recall to have heard of the exact term before, four did know the purpose of the policy. So, in total nine of the respondents could spontaneously name reducing costs as the aim of the preference policy. The same nine respondents were partly able to explain how the policy works. Here, mainly the changing of brands and the reimbursement of cheaper brands were mentioned. The other 10 respondents had no idea what the policy stands for, either because they never heard of it or because they could not remember what it stands for exactly. After being given a fuller explanation of the policy’s aim and execution by the interviewer, all 19 respondents claimed to recognize the policy’s outcomes (e.g. changing brands) from their experience, even though they often were not familiar with the name itself. Everybody thus experienced the policy, but their awareness of and knowledge about it varied considerably. When comparing the answers on all questions in the interview of the respondents that could spontaneously mention its aim and working principles with the answers of the respondents that could not, no noteworthy differences were found.

4.3 Experienced changes

The respondents identified a variety of changes as a result of the policy. Some were mentioned more often than others. Changes in packaging, which mainly refer to the boxes, were mentioned by all respondents. Most of them experienced this several times. The varying color and shape of the pills is another often noticed change as a result of the policy, mentioned by 11 respondents. Furthermore, six respondents mentioned the occurrence of new side effects as a possible consequence of a brand switch. All of them blamed the side effects on differences between the different brands, though two hesitated a bit on this. For example, one woman (56 yrs, 10 prescribed drugs) said *“That is what I experienced with Omeprazol, we had them in yellow and in white, but with the white one I felt better. There are other ingredients in it.”,* and another woman (77 yrs, 5 prescribed drugs) said *“It is just like they are worse. I guess that is not really the case, but they made me dizzy.”.* Overall, the brand that resulted in side effects was seen as being of lower quality. Something most associated with it being cheaper and containing different pharmaceutical excipients. One man (64 yrs, 4 prescribed drugs), for instance, said *“My wife has medication for osteoporosis, which she already had before she got the cheap one. And those made her ill, while they say it includes the same ingredients. But it was not the same, it contained another substance. A substance she could not resist.”.*

In addition, a change mentioned by two respondents was longer waiting times. One respondent discussed that she often had to wait when picking up her medication, because other patients need more information on their medication. The other noticed that the pharmacy sometimes did not have the preferred brand on time due to stocking problems, as a result of the preference policy and its changing preferences.

4.4 Medication management

One of the potential consequences is that the experienced changes could disturb the routines of medication intake, both in the form of medication non-adherence and an increased effort. To study this, first the use of medication in general was explored, without specific regard to the policy. All respondents claimed to have a daily routine for the intake of their medication. This means that they all have a certain moment of the day (morning, afternoon or evening) at which the medicines are taken. Most indicated that they combine this with habits during the day like having breakfast, afternoon tea or evening diner. In addition, they all indicated that they adhere to their regimens on a normal day. Some did, however, admit that every once in awhile a medicine is forgotten, which is related to deviations from the daily routines of life, like parties and holidays. One woman (72 yrs, 3 prescribed drugs), for instance, said *"It sometimes occurs that you make a mistake when you are somewhere else, so eat at another place. In such cases it happens that you forget something because it disturbs your routine."*, and a man (61 yrs, 6 prescribed drugs) said *"Well I would not say that I never forget them, I forget them every now and then. But, maybe twice a year, no more.".* Overall, people do not seem to have a hard time remembering themselves to take their medication. As one woman (82 yrs, 9 prescribed drugs) puts it: *"It is just like brushing your teeth. You also have to do that. It is part of waking up and having diner.".* The ones that do need a reminder mentioned reminders from a spouse, using a divider box, and placing medication somewhere in their view as ways to do this. Furthermore, the main reason given for being adherent is the purpose of taking them, which is remaining as healthy as possible. For example, one woman (77 yrs, 5 prescribed drugs) said *"Because I know my sugar regularly stays high, I ensure that I take my pills."*

When asked, all respondents said that their routines had not been disturbed by the policy to the extent of making mistakes because of it. So, it does not lead to medication non-adherence according to their self reports. Some respondents did indicate, however, that the effort to be adherent increased. First of all, because they have to pay more attention to the medication they take. One woman (62 yrs, 4 prescribed drugs) said *"Before I hardly looked at it. I did not look at the side effect descriptions and did not look at the boxes because they were all the same. The pills, the colors, everything was the same. So, hush hush, I put them in a divider box for a week. But now I pay more attention to it.".* This idea is supported by another woman (72 yrs, 3 prescribed drugs) who said *"It does not matter which brand I get, as long as it contains the right substances and they do not change it all the time. So, not every time another type of packaging that makes it necessary to pay more attention.".* Furthermore, three respondents experienced that the packaging of some brands is much harder to handle. For example, one woman (72 yrs, 3 prescribed drugs) said *"For me the main difficulty has to do with those stupid packages. First, I had one that was pretty easy, but now I get this brand where I am continuously struggling with because they break and partly stay in the package."*.

Although less explicit, 10 respondents mentioned confusion caused by changing pills and especially boxes as a factor that increased the effort. They said that they get used to the appearance of the box and pills, so when this changes they get confused about which one to take when. For example, one woman (79 yrs, 4 prescribed drugs) said *"Just when you have memorized which one to take when, you get another box."*, and one man (83 yrs, 6 prescribed drugs) said *"Sometimes the box discredits us. You get this completely different box, while you are so used to your old box which you*

already have for months. Sometimes I then doubt whether I have the right one. So, sometimes that is a handicap.". When looking at the people who reported such issues, it became clear that all of the people reporting confusion were using six or more prescribed drugs and were older than 65 years, whereas none of the people younger than 65 years and with fewer than six pills reported any confusion.

Confusion is being related to an increased effort in several ways. As one woman (82 yrs, 9 prescribed drugs) said *"It is confusing, inconvenient, and it takes more time. It is mainly hard at the beginning. You start to doubt your own capacities to be able to manage it yourself. And you put, at least I do, your heels in the sand because I want to be able to do this, I want to hold on, I do not want to give up, and I want to solve it myself. But I do see it coming that at one point I will have to let the pharmacist do it for me.".* First of all, confusion is shown to increase the time needed to organize the medications, take the right one, and to get used to the new one. Furthermore, the statement shows that getting used to the medication is a cognitive effort that requires certain capacities. Capacities that in older women like this respondent apparently deteriorate over time, making it eventually impossible to remain autonomous on taking and managing the own medication. In addition, four respondents also mentioned how the confusion leads to an emotional burden caused by fear about taking the wrong medicine, and insecurity about which pill to take or about one's own capacities to manage the medication. For example, one man (69 yrs, 6 prescribed drugs) said *"When I get another box this is a problem. I am scared that I will make mistakes."*, and one woman (74 yrs, 10 prescribed drugs) said *"Sometimes I suddenly have a new one. Then I think what the hell is that? And then I stand with heart palpitations at the table. Because I get this entire package you know.".* From these statements it can be read that the confusion does not only disturb routines because it increases the effort to maintain them or to adjust them, but that it could also lead to non-adherence.

To minimize the effort needed to maintain the routines, several respondents came up with some solutions. One, for instance, always ties part of the old box onto the new box to recognize it. Another puts the new medication in the old boxes. One just writes the name of the old brand on the new one. As far as the above-reported quotes on confusion caused by changing appearance of medication packages did not already, these coping strategies illustrate the importance of habituation as part of the routine.

4.5 Pharmacist-patient relationship

Another research question was to explore whether patients experienced a change in the relationship with their pharmacist as a result of the introduction of the policy through having a possible impact on satisfaction and trust. This quality of the relationship is important because it determines whether a patient accepts the advice and information of the pharmacist.

First, exploring how people perceive the role of the pharmacist in general, without specific regard to the policy, revealed that patients make use of the informative role of the pharmacists to a certain extent, which makes the relationship important for all of them. The extent does, however, vary, and it seems that not all respondents are as aware of this specific role of the pharmacist. For most respondents, the amount of information and advice needed turned out to be limited. This mainly has to do with the fact that most have used the same medication for a long period of time already, making

information on it often unnecessary. For example, one woman (46 yrs, 7 prescribed drugs) said *"If I have a question I ask it. But I hardly need it, I always use these.",* and one man (61 yrs, 6 prescribed drugs) said *"It is actually only the dispensing of medication. Perhaps this is partly because of me since I never have any questions.".* Some respondents also claimed that their GP or specialist fulfills this informative role for them and they do not need the pharmacist to do it as well. A man (70 yrs, 8 prescribed drugs) explained *"We are being informed by the neurologist and the general practitioner. The general practitioner comes by every month, so if we have any questions we can ask him."*

With the introduction of the policy, however, the importance of the informative role increased. This is mainly because communication on changing brands is seen as necessary to prevent the earlier mentioned consequences like confusion and mistakes. For example, one woman (72 yrs, 3 prescribed drugs) said *"They always say it, I must say. They always say that it changes and they actually also have to. If they would not, you could react like do I get another medicine or other pills.",* and a man (82 yrs, 4 prescribed drugs) said *"We do not know what is in it. I mean if the box looks different from the outside, you think is it the same or is it something else. You start to doubt and this is of course not a good thing."*.

Of the respondents, 15 believed that the quality of the advice and guidance given has not changed in a negative manner since the introduction of the policy, and valued it as good. Three respondents even think the quality has increased, stating that the pharmacist gives more information with the changing brands. Two respondents think the quality decreased, however, and were dissatisfied with the way the brand changes are being communicated to them. Both claimed they were not being informed on this, but being surprised when they noticed something changed. For example, one man (70 yrs, 8 prescribed drugs) said *"They give another brand, another color. But they do not inform us, they just put it in the bag (…) They do not say watch it, that medication has changed. We had to because of the health care insurer and you do not have to get frightened. But we hear nothing"* and one woman (74 yrs, 10 prescribed drugs) said *"When a medicine changes they do not communicate on this.".*

The dissatisfaction with the way the changes are communicated seems to affect the overall satisfaction with the pharmacists as well. All respondents claimed to be satisfied with the pharmacist, something they have been for years, except for the two respondents that were discontent with the way they had been informed. Both claimed that this is also the sole cause of their dissatisfaction, because they have always been satisfied with their pharmacists. It must be added, that the lack of communication was experienced by more respondents. Two other respondents also claimed to not always receive information when a brand changes. They, however, understood how this could happen and did not see it as a reason for dissatisfaction. One man (64 yrs, 4 prescribed drugs), for instance, said *"I can sympathize with the pharmacist. I am not the only client at the pharmacy, making it hard for them to know whether my box was already changed or not. So, if I already know about this.",* and another man (69 yrs, 6 prescribed drugs) said *"Sometimes it is being told, sometimes it is not. (…) everybody can make a mistake sometimes".* This different reaction to the lack of information shows that insufficient communication does not necessarily influence the satisfaction with the pharmacist.

Trust turned out to be hard to discuss, which had to do with the fact that most respondents believed it was essential to trust the pharmacist to be able to accept things from him or her. One respondent expressed this importance by saying: *"I have to trust my pharmacist, else I would not dare to take my medication" (Woman, 77 yrs, 3 prescribed drugs).* This respondent seemed to be referring to trust in the pharmacist's competence, which for her determines the acceptance of the actual medication. Only one of the respondents showed a lack of trust in the pharmacist's honesty and fidelity as a result of the policy. This man (70 yrs, 8 prescribed drugs), for instance, said *"No, no they (the pharmacist) do not have to tell me that this (changing brands) is because of the health care insurer. If they would have to do this by the health care insurer, than they would have to stick to it and not change it when we call (…) But that is not how they act. When we call to complain they change it back. This makes me think that they do this on their own.".* It must be noted that this is an exceptional case, since the other respondents explained that overall the pharmacists communicate properly, and that it does not necessarily lead to such dissatisfaction and distrust.

4.6 Medication efficacy beliefs

The preference policy could potentially influence the beliefs of patients on the efficacy of their medication. For this reason, the current beliefs were studied. To gain insight into the beliefs of the respondents about the medication they receive and other brands, it was first asked whether the respondent has a preferred brand. Only two respondents claimed they did, both for the reason of wanting to keep things the same. For example, one woman (73 yrs, 9 prescribed drugs) said *"I want to keep that one (...) When you are older you are not going to change something you have always been used to.".* All other respondents said not to care about which brand they receive. An opinion that most supported with a statement similar to: *"As long as it is effective"* (Man, 69 yrs, 6 prescribed drugs). Two respondents also said that their own lack of knowledge regarding which brand is good and which is not, makes it impossible for them to say which they prefer.

When asked, 15 respondents claimed to trust their medication. One of them did, however, indicate that he trusts the effectiveness of most of his medicines except for one, due to a changed blood value ever since he has been taking it. Here, the effectiveness of the medication clearly determines the level of trust. This was also the case for other respondents. For instance, many said that they trust the medication because they feel better with them and have no complaints. Other fundaments of trust in the effectiveness and quality mentioned are trust in the physician and pharmacist, and not being a suspicious person. For example, one woman (71 yrs, 2 prescribed drugs) said *"Yes, I trust that. I read the instructions and trust that the medication is good. Perhaps this is too easy-going but well."*, and one man (64 yrs, 4 prescribed drugs) said *"I trust my physician, who prescribes the medication to me. I am not a doctor myself, so I do not know what medication I need."*

The four respondents, who trust the quality and effectiveness of the medication received less, expressed this by saying that they are more attentive on, for instance, how they feel, after a brand changes. For example, one woman (77 yrs, 5 prescribed drugs) said *"It (a brand change) is slightly annoying. You start to think that it might not be good. It makes you doubt a bit. But well, after a few days, I always decide to try it out before going to the doctor, it is fine."* and one woman (72 yrs, 3 prescribed drugs) said *"Of course you are alert when the packaging changes, you have to watch*

whether you do not feel any different than before. So, you are more focused on it." When comparing these four respondents with the respondents that mentioned side effects as something resulting from the brand changes, it is found that all four mentioned side effects. It should be noted that not all respondents that mentioned side effects express this distrust.

The same four respondents are supported by three additional respondents in their belief that there are differences in effectiveness and quality between brands. These three, base this either on having heard about the occurrence of side effects, or on an experienced lower effectiveness. For example, one man (69 yrs, 6 prescribed drugs) said *"I trust my medication, except for the blood thinner in the morning. This one is less (effective) than before."*. The other 12 respondents said not to be aware of such differences in effectiveness and quality. From their statements it does, however, appear that they are not certain about this. One woman (60 yrs, 4 prescribed drugs), for instance, said *"I have no experience with that. At least it has not troubled me."* and one man (82 yrs, 6 prescribed drugs) said *"I can imagine that it exists, but I have no experience with it.".*

4.7 Patient satisfaction

This study also included an examination of the potential effect of the policy on patient satisfaction. As has already been described in chapter 4.6, the majority of the respondents is satisfied with their pharmacist and this has not changed with the introduction of the policy. In addition to this, it is found that most respondents are also satisfied with the actual medication received. Something they also claimed to have been before the introduction of the policy. The main reasons given for being satisfied with the medication is that they seem to be effective and that they cause no physical problems. For example, one woman (63 yrs, 2 prescribed drugs) said *"I am satisfied because it works. I feel better with them."* and another woman (82 yrs, 9 prescribed drugs) said *"No it (the policy) had no effect on that. The medication has been good from the beginning. I am very satisfied about that, and that is why I keep taking them everyday".*

Two respondents indicated that they are less satisfied with their medication since the introduction of the policy. For one, this is because of a lower perceived efficacy of the medication. The other is less satisfied because of the frequency of the changes. She (62 yrs, 4 prescribed drugs) explained that if it would happen once a year it would be fine, but every three months is too often, by saying *"When you get another brand every three months, another box, another pill, than that is too much. It gives you the feeling that you are being fobbed of with the cheapest possible brand. The medicine might be fine and its effect exactly the same, but it makes me feel like: Jesus another pill again!"* This respondent also once experienced side effects due to a changed brand, but this is not mentioned as a factor in the decline of her overall satisfaction with the received medication. All other respondents that experienced side effects at some point claimed to be satisfied with the medication they currently receive.

When comparing all different responses with the age and number of prescribed drugs of the respondents, no obvious relationships with treatment satisfaction appeared.

4.8 Attitude towards the policy

Of all respondents, 11 evaluated the policy positively with regard to its aim and the way it is being executed. The main argument for being positive was the policy's aim to save money. For example, one woman (56 yrs, 10 prescribed drugs) said *"I believe that they should definitely do this. If you see*

what it all costs, it's terrifying!". However, all 11 patients mentioned an essential condition for being positive, namely that the reimbursed medication should be effective and have no negative effects on the body as compared to the previous medication. As long as this condition is met, they do not see any reason to be against the policy. A women (age 71, prescribed 2 different drugs) explained *"I think it is good when it is cost saving. But it should of course not have a negative influence on your body.",* and a man (61 years, 6 drugs prescribed) said *"I do not really have any problems with it. After all, it is about the working ingredient that is in it, which is claimed to be the same. Who am I to refute that?".*

The eight respondents who had a negative attitude towards the policy said that they understand the necessity of saving money, but expressed a variety of reasons to be against it anyway. One reason mentioned was the confusion caused by the varying physical appearance of the boxes and pills with the changing brands. One woman (72 yrs, 3 prescribed drugs), for instance, said *"When I add it all up together, and see that it also has a lot of disadvantages for people that have trouble arranging their medication themselves, I think the policy is not entirely adequate (...) Or they should keep the pills and packaging as much the same as possible."*.

A second reason given for being against the policy has to do with the perceived health effect of the differences between the brands. Some patients believe that differences in pharmaceutical excipients could cause side effects or make the medication less effective for some people. For example, one woman (60 yrs, 4 prescribed drugs) said *"I think that people who benefit from a certain brand and get another one, with perhaps different filling ingredients, could be harmed.".* In addition, the respondents using this argument added that they believe that paying the already high premiums gives them the right to receive the best medication available. Something they believe they are currently not getting, because they can only get the cheapest medication. A woman (62 yrs, 4 prescribed drugs) explained *"I am mainly annoyed by the fact that I as a human being do not get the best medication but the cheapest.".*

The third argument given for being against the policy was related to the user-friendliness of the medication packaging. As mentioned earlier (Chapter 4.4) three respondents claimed that some of the brands have packaging that is much easier to handle than that of other brands. The changing of brands thus results in having a brand that you are very satisfied with at one moment, and a brand that you have to struggle with on a daily basis at the next.

Finally, a last reason given for being opposed the policy was related to the changing of brands. Three people indicated that they do not like change. They are used to a certain brand and want to keep this because they know it works well and they trust it. One woman (77 yrs, 5 prescribed drugs), for instance, said *"I would rather always have the same brand. It makes me know what I can expect.".*

In addition, the respondents were asked whether they would be willing to pay extra for keeping the brand they are used to at the moment the preference changes. Here it came forward that not all respondents that would pay extra expressed a negative attitude towards the policy with the earlier question on this, and vice versa. So, not all respondents that would not pay were positive about the policy, and not all that would pay were negative. These variations seem related to the reasons given for being positive or negative about the policy. Three respondents said they would pay extra, which was mainly for reasons of expected quality, but for one also to prevent the frequent changes. For

example, one woman (62 yrs, 4 prescribed drugs) said *"I would only pay it for the one where I would like the original or, I should say, the best brand of. The one I actually always used to have.".* The respondent, who was positive, said he would pay extra because *"You need to get used to the changed medication every time. Your body has to get accustomed to it."* (70 yrs, 8 prescribed drugs).

Of the 16 respondents that would not pay, 10 felt that it was not necessary since changing brands did not physically harm them; *"I would not pay. I think that if I would get another medicine and know that it is exactly the same with respect to its content, that I would not mind."* (Woman, 72 yrs, 3 prescribed drugs). Of these 10 respondents, 3 were against the policy. Their reasons given for this were however mainly related to their beliefs about potential consequences of the policy for other (e.g. older) patients. So, for them a changed brand did not really matter. Another often-given argument against paying extra is related to financing. Both respondents that would not be able to afford it themselves and respondents that could afford it believed this option would not be fair. For example, one woman (74 yrs, 10 prescribed drugs) said *"I already pay so much for health care, I do not think I would be able to afford that."*, and another woman (79 yrs, 4 prescribed drugs) claimed *"Well, for me it would not be a problem to pay extra, but for others (...) Yes, and I do not think it should be that way. It would not be a good solution.".* Finally, a third argument mentioned against paying extra was trust in the health care system. Three respondents said they trusted that the medication provided to them was good. As one woman (46 yrs, 7 prescribed drugs) said *"The box does not matter and I do not know which brand is good. I believe in the doctor that provides me with the medication.".* One of these respondents was negative about the policy, but mainly for reasons of a lack of communication.

Overall, it seems that the respondents that are not willing to pay were positive about the policy, negative for reasons that did not personally affect them or are not necessarily related to the changing brands (e.g. a lack of communication), or unable to pay. The respondents that are willing to pay were either negative about the policy or positive even though they do experience consequences they would rather prevent.

5. Discussion

The preference policy has proven to be effective in reducing the pharmaceutical expenditures. However, its impact on the patient level is unclear. Therefore, the main goal of this study was to obtain a more detailed image of the consequences of the preference policy for patients. To achieve this, qualitative interviews were held with 19 CVD patients that experienced the introduction of the preference policy. The interviews were designed in a way that both the consequences that were thought of before and potential unknown consequences could be discussed.

With regard to the specific research questions it was found that due to the policy, patients often experienced concrete changes in side effects and different looking boxes and pills. As a consequence of these changes, medication management became a larger effort, although according to the respondents their medication adherence did not decline. Furthermore, it was found that, overall, the relationship between the pharmacist and the patient remained the same, and that most patients have positive expectations of the efficacy of their medications despite regular changes in medication. In addition, patient satisfaction with pharmaceutical care (i.e. the pharmacist and the medication)

seemed hardly affected. Hence, the main consequence of the policy for patients has to do with disturbing people's medication routines and the amount of effort required for adapting to the changes in medication. Beyond the planned interview topics, no surprising consequences of the policy were reported.

Reflecting on the various interview topics in detail helps understand some of the findings. First of all, the finding that the main experienced concrete changes are side effects and different looking pills, leads to the conclusion that increased waiting times, less suitable medication, and mistakes by pharmacists are not experienced in the extent that was expected based on the theoretical framework. These findings overlap with the experienced concrete changes mentioned in the quantitative studies by the NIVEL and the NPCF (2008). The fact that mainly side effects and different looking boxes and pills are experienced is thus not completely surprising.

When inquiring about the participants' perceptions on the effect of the policy on their medication routines, patients reported that they did remain adherent, but also that the effort to do so increased. Parts of these findings were also observed in an earlier study by van Wijk et al. (2005) on the effect of generic substitution on medication adherence. In a quantitative study conducted in the Netherlands between 1999 and 2002 they observed that generic substitution of antihypertensive drugs did not lead to lower adherence. That respondents remained adherent despite increased efforts, suggests that people are highly motivated. This could, for example, be explained with the effect of beliefs of medication. Research has shown that patient's beliefs on the necessity of the medication to maintain healthy predicts medication adherence, because it increases their motivation (Horne & Weinman, 1999). From the statements of some respondents it became clear that they indeed see their medication as very important for their health, and thus are very motivated to take to the effort to remain adherent. In addition, one of the ways through which adherence was thought to decline was through the negative impact of the policy on the medication efficacy expectations. The results of this study on the efficacy beliefs, however, show that most respondents trust the efficacy and quality of their medication, and therefore do not have negative expectations. Overall, it is thus not unrealistic that medication adherence did not decline. Nevertheless, it should not be forgotten that the results of this study are self-reported. This is, in case of medication adherence, not seen as the most reliable method for reasons of bad memorization and wanting to give a social desirable response (Osterberg & Blaschke, 2005; Rolley et al., 2008). So, although there are various theories to explain the remained adherence, it is not concluded to be a definite fact.

Second, the effect of the policy on the amount of effort required to maintain the routines can be related to the changed physical appearance of the medication and its boxes. This finding confirms the assumption of van Kappen (2010) that the changing brands cause uncertainties surrounding medications. For some patients, the effort increased due to a decreased user-friendliness or a small disturbance of the routines. In addition, for people older than 65, with a relatively higher number of prescribed drugs (≥6), changed boxes and pills are found to cause confusion and thereby effort. Interestingly, an earlier study showed that this same group of patients was also found to be less adherent (Volpe, Chin & Paneni, 2009). This group is thus already prone to the risk of non-adherence,

which is assumed to be worsened by the increased effort. Hence, this consequence should be taken serious.

The pharmacist-patient relationship was regarded as important due to its effect on medication adherence. The effect of the preference policy on the determinants of the quality of the relationship, patients' satisfaction and trust, was found to be minimal. First of all, this might be because part of the changes that were thought to influence this, were rarely experienced. This, for instance, counts for increased waiting times and less suitable medication. Furthermore, most respondents claimed that the communication of the pharmacist on the medication changes, a factor also considered as being of great influence on the levels of satisfaction and trust (Ware et al., 1984; Sitzia & Wood, 1997), was very good. In addition, the high level of satisfaction could be related to the high mean age of the respondents (69,5 yrs). In previous studies, age has been shown to be correlated with satisfaction, with older people often being more satisfied (Hall & Dornan, 1990; Jackson et al., 2001).

Communication by the pharmacist was found to be an important factor with regard to patient satisfaction with the pharmacist. However, a lack of communication by the pharmacist did not affect the level of satisfaction among all respondents in a similar way. This can be explained with the role of expectations about a pharmacist's services on satisfaction. As described in the theoretical framework, satisfaction is based on a comparison of the expectations with the actual experience. Because of this, it is possible that people with the same experience, value this differently due to different expectations. In this case, the respondents that remained satisfied after a lack of communication on the changing brands, for instance, expressed that they understand that pharmacists can forget to tell about a change. While the respondents who were less satisfied, clearly stated that they expected an explanation when a brand changes. Overall, based on the finding that trust in and satisfaction with the pharmacist hardly declined, it is concluded that the relationship between the pharmacist and the patient has not been harmed by the preference policy. It can thus be assumed that medication adherence is unlikely to have declined because of this.

The beliefs of a patient about the efficacy of the medication were studied to see if there is any reason to believe that they were negatively affected by the policy. It is found that most respondents claim to trust their medication and thus have positive expectations regarding the efficacy of their medication. When looking at the people who do not trust their medications, there seems to be a relationship between being certain about differences between brands and/or not trusting every brand, and having experienced side effects or a lower efficacy of the medication. This is, however, not the case for all respondents and on all occasions. It was, for instance, expected that people who pay extra attention to a new medicine to make sure it works well, have some doubts about the efficacy. Such doubts could cause side effects or a lower efficacy according to the theory of the nocebo effect (Haga et al., 2009). The results, however, show that this is not always the case. Besides that, for the respondents that did experience side effects or a lower efficacy and expressed a lack of trust, it is impossible to say which of these came first. This means that it is unclear whether the side effects or perceived lower efficacy caused the lower expectations, or were potentially caused by it. Based on this, it can thus not be said whether the changes with the preference policy lead to negative expectations on the effectiveness of the medication.

The final topic that was studied was patient satisfaction. The effect of the policy on this also seems limited. As discussed, the satisfaction with the pharmacist hardly declined. Furthermore, the satisfaction with the medication or actual treatment received barely changed. As expected from the literature, the effectiveness of the medication was of great influence on this type of satisfaction. Considering that most respondents did not experience any problems with the effectiveness, it is thus understandable that they are satisfied. Furthermore, the satisfaction could again have to do with the high average age of the respondents and the correlation of age with satisfaction. In general, since patient satisfaction is one of the indicators of quality of care, the limited effect of the policy on it can, in addition, be seen as an indication that quality of care did not decline with the policy.

The attitude of patients with regard to the policy was measured to answer the second part of the main research question (i.e., how are the consequences valued with regard to the purpose of the policy). For this purpose, it was analyzed whether a relationship could be found between the experienced consequences of the respondents and the expressed attitude. Overall, people with a positive attitude mentioned the same consequences as people with a negative attitude. So, no relationship could be found. Some people, for instance, saw the confusion they experienced as a reason to be against the policy, where others did not. The same counts for people experiencing side effects. Where some see this as a reason to see the policy as a bad thing, others do not. A possible explanation for this difference in attitude might be that the perception on the importance of saving money differs between the respondents. When one weighs his or her personal consequence as heavier than the importance of saving money in the health care system, it is understandable that the attitude is negative and vice versa. Based on these findings it cannot be concluded whether any consequence is unacceptable or not.

6. Strengths and limitations of the study

Strengths of this study are that interviews were continued until data saturation occurred. Moreover, the interviews were conducted in different pharmacies and with patients of different age groups, educational levels, and medication burden. Finally, a strength was that the coding was checked by a second coder to ensure its comprehensiveness.

Limitations of the present study were, however, the low response rate to the invitations. This may have resulted in a non-representative sample of the general population, despite that no differences were found on age, gender and medication burden between those participating and those declining. Moreover, the way the pharmacists were selected could have created a selection bias. This has to do with the background of two of the pharmacists, who are currently doing a PhD next to their work as a pharmacist on topics related to improving pharmaceutical care. This is an indication that they value the quality of the care they provide, which might make them exceptionally good pharmacists for their patients. As a result, the findings of this study might be an underestimation of the impact of the preference policy. Finally, using qualitative interviews to gather the desired information also brought its limitations. As was already mentioned, it is very hard to say whether the respondents were truly adhering to their medication regimen based on self-reports. A certain level of recall and reporting bias should thus be taken into account. Furthermore, the respondents knew that the pharmacists helped

with this research to a certain extent, and even though their anonymity was guaranteed, this might have biased their responses.

7. Recommendations

The present study permits the offering of several recommendations for follow-up research and health care practice. First, although it was reasoned that the policy might have affected the pharmacist-patient relationship and overall patient satisfaction, this turned out not to be the case. Hence, these are not the most pressing topics for follow-up research on the consequences of the preference policy. Second, given the potential gap between the self-reported and the actual medication adherence, it might be useful to gain more insight on this. Hence, follow-up research should focus on measuring the true effect of the policy on medication adherence. This could perhaps be done by using patient refill records. Third, it would be interesting to study whether the lower medication efficacy expectations were caused by experiencing side effects or if the side effects were caused by the lower expectations. In addition, the extent of the problem of confusion caused by the changing brands should be studied. From the outcomes of this study it seems evident that it is an often experienced problem, but it would be useful to validate this with a quantitative study. Furthermore, follow-up research should focus on the impact of the policy for elderly, using more than six prescribed drugs a day. Specifically, the impact on, for instance, the quality of life of these people would be interesting to study. In sum, follow-up research should thus focus on the effect of the policy on medication adherence, medication efficacy beliefs, confusion, and the quality of life of elderly using a high number of prescribed drugs.

The main issue for health care practice is communication. The respondents of this study clearly expressed the importance of communication. Firstly, it is thus recommended to the pharmacists to keep paying specific attention to their communication on the changing brands. Second, the health care insurers and the Dutch Health Care authority (NZa) are recommended to revisit their position on a special reimbursement for the pharmacists to provide extra information. Ever since the introduction of the policy, pharmacists have wanted a compensation for the increased costs that stem from the extra information provided. Rules on this could be set in the, currently under development, performance descriptions for the pharmaceutical sector of the NZa. In these descriptions it is laid down what reimbursements should be given for specific performances, and what tasks fall under these performances. So, if something will be reimbursed, it should be in this policy (NZa, 2010). The current draft does not include a reimbursement for the additional information that needs to be given due to brand changes. Looking at the role of this extra offered information in preventing some of the potential consequences of the policy, the request for an additional reimbursement is however not that unreasonable. Especially, when you consider the potential negative health outcomes if it is not done properly, and the costs this will give for the insurers through increased medical expenses. Hence, it is recommended that the NZa should discuss this type of reimbursement with the pharmacists and the health care insurers, to develop a solution all parties can agree upon.

8. Conclusion

Based on the results it can be concluded that the biggest consequence for the patients has to do with their routines of medication intake. Many patients experienced an increased effort to maintain the routines, which is mainly related to the changes in packaging. The pharmacist-patient relationship, patient satisfaction, and beliefs in efficacy turned out not to be affected as much. Furthermore, no additional unexpected consequences were mentioned. Whether patients perceive the consequences to be enough reason to see the policy as unacceptable varies. Some see the consequences as an argument to stop with this policy, where others are willing to accept them for the greater good.

Overall, it can be concluded that for the majority of the population the consequences are acceptable. However, this does not mean that nothing needs to be done about the consequences that are experienced. On an individual level the consequences might severely affect the quality of life, which should be prevented or at least minimized. More research is required to be sure what the best solution is, but communication strategies will definitely have to be part of this.

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Appendix I: Interview pharmacists

Vragen:
1. Wat zijn uw ervaringen wat betreft de gevolgen van het preferentiebeleid voor de patiënt? En wellicht zaken die u van uw collega's heeft gehoord?
- op het gebied van medicijninname (verwarring gebruik, stoppen, medicatie fouten, therapietrouw)
- op het gebied van fysieke klachten (bijwerkingen)
- Op het gebied van routines in medicijninname
- Op het gebied van patiënt tevredenheid(wachten, volgende dag terug moeten komen omdat pillen niet op voorraad zijn, etc)

2. Zijn de problemen die u noemt in uw ogen veel voorkomend?

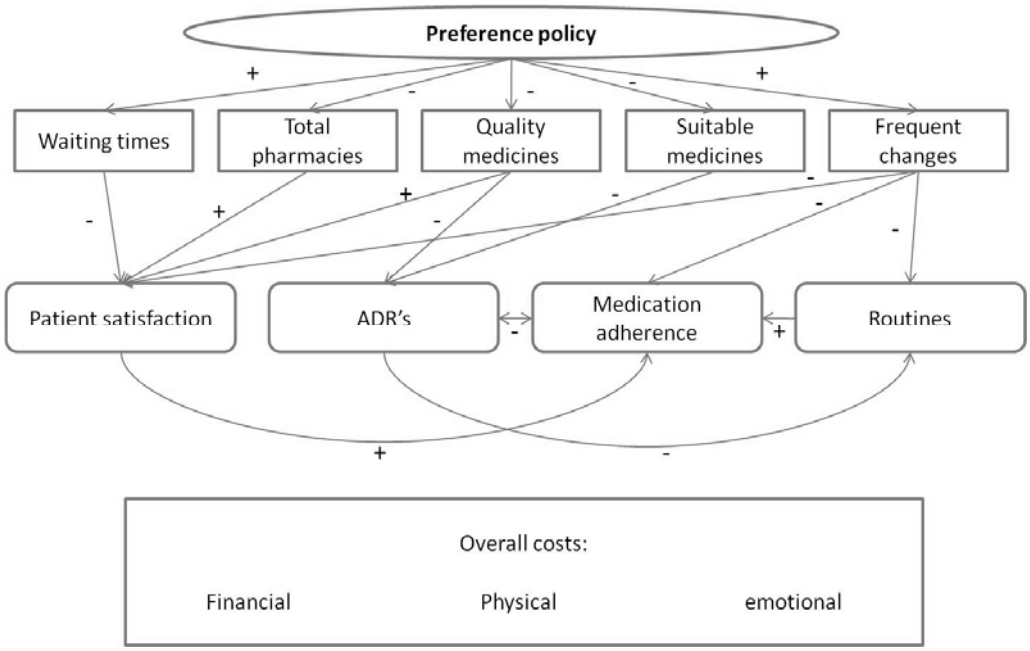
3. Zijn er bepaalde groepen mensen waarvoor deze problemen in meer of mindere mate lijken te gelden (ouderen, jongeren; meerdere ziekten en pillen tegelijk; opleiding; etniciteit)?

4. Denkt u dat er verschillen zijn in de gevolgen voor de patiënt tussen de verschillende verzekeraars door de verschillende uitvoeringen van het preferentiebeleid?

5. Wat zijn in uw ogen mogelijke oplossingen? Doet u al iets?

Bespreken model!

Model



6. Ik wil graag op basis van de gegevens uit de literatuur en deze interviews, een vragenlijst opstellen voor patiënten over het preferentie beleid.
Zou u daaraan mee willen werken middels het vragen van geschikte mensen?
Denkt u dat uw cliënten/klanten/patiënten mee zouden willen werken aan mijn onderzoek?

Appendix II: Invitation letter to respondents (First selection)

Wageningen, 13 januari 2011

Geachte meneer/mevrouw,

Mijn naam is Ilse Pastoors en ik ben student Gezondheid en Maatschappij aan de Wageningen Universiteit. In verband met mijn afstudeerscriptie ben ik bezig met een onderzoek onder patiënten naar de gevolgen van het preferentiebeleid, ook wel bekend als het voorkeursbeleid, van zorgverzekeraars. Dit is het beleid van zorgverzekeraars dat bepaalt dat zij bij sommige medicijnen een voorkeursmerk kunnen vaststellen. In dit voorkeursmerk zit dezelfde stof als in andere merken maar het is voor zorgverzekeraars het goedkoopst. Zorgverzekeraars kunnen elke 6 of 12 maanden hun voorkeursmerk veranderen en kiezen voor het middel dat op dat moment het goedkoopst is. Hierdoor kan het zijn dat u regelmatig een ander merk krijgt. Dit kan betekenen dat de verpakking anders is of dat uw medicijn er anders uitziet. Als ze dit doen vergoeden zij alleen dit gekozen merk en kunt u andere merken alleen vergoed krijgen in het geval van een medische noodzaak. Sinds de grootschalige invoering van het beleid in 2008 heeft het de zorgverzekeraars veel geld bespaard, maar de gevolgen voor patiënten zijn tot dusver niet onderzocht. Het is echter wel belangrijk te weten wat de gevolgen zijn van dit soort beleid voor de patiënt (positief of negatief). Dit is dan ook waar ik met mijn onderzoek een begin mee wil maken.

Mijn vraag aan u is of u deel zou willen nemen aan dit onderzoek door middel van een interview over uw ervaringen. Een interview zal ongeveer een uur duren. De interviews zullen plaatsvinden in de periode van 31 januari tot en met 25 februari. U kunt u aanmelden door het aanmeldformulier ingevuld terug te sturen naar uw apotheker met behulp van de antwoord envelop of een email te sturen naar het email adres aan het eind van deze brief. Indien u niet geïnterviewd wilt worden, wil ik u vragen uw reden hiervoor aan te geven op het hiervoor bestemde formulier en dit formulier eveneens met behulp van de antwoord envelop terug te sturen.

U krijgt deze brief via uw apotheek, die bereid was om aan dit onderzoek een bijdrage te leveren. Met het terug sturen van het aanmeldformulier of het zenden van een email geeft u uw apotheker toestemming om uw contactgegevens aan mij door te geven. Deze gegevens zullen uitsluitend gebruikt worden om contact met u op te nemen voor het maken van een afspraak. Uiteraard zal alles wat u vertelt tijdens de interviews vertrouwelijk worden behandeld wat betekend dat ook uw apotheker geen inzicht krijgt in wat u mij vertelt.

Ik hoop u hiermee voldoende geïnformeerd te hebben en dat u bereid bent deel te nemen. Als u nog vragen heeft over het onderzoek die u graag beantwoord krijgt voordat u zich aanmeld voor deelname kunt u vrijblijvend contact met mij opnemen via het nummer 0641573087 of het emailadres ilse.pastoors@wur.nl. Hopelijk tot snel.

Met vriendelijke groet,

Ilse Pastoors

Aanmeldformulier interview

Naam:

Leeftijd:

Geslacht:

Telefoonnummer:

Adres:

Afmeldformulier interview

In verband het onderzoek zou het enorm helpen om te weten waarom u niet geïnterviewd wilt worden. Dit kan om vele redenen zijn, van welke allen uiteraard geaccepteerd. U kunt hieronder een van de mogelijkheden aankruisen. Indien uw reden er niet tussenstaat, kunt u deze invullen.

- o Ik houd niet van interviews
- o Het beleid heeft voor mij geen gevolgen gehad
- o Ik heb geen tijd
- o Anders, namelijk

Appendix III: Invitation letter to respondents (second selection)

Wageningen, 15 februari 2011

Geachte meneer/mevrouw,

Mijn naam is Ilse Pastoors en ik ben student Gezondheid en Maatschappij aan de Wageningen Universiteit. In verband met mijn afstudeerscriptie ben ik bezig met een onderzoek onder patiënten naar de gevolgen van het preferentiebeleid, ook wel bekend als het voorkeursbeleid, van zorgverzekeraars. Dit is het beleid van zorgverzekeraars dat bepaalt dat zij bij sommige medicijnen een voorkeursmerk kunnen vaststellen. In dit voorkeursmerk zit dezelfde stof als in andere merken maar het is voor zorgverzekeraars het goedkoopst. Zorgverzekeraars kunnen elke 6 of 12 maanden hun voorkeursmerk veranderen en kiezen voor het middel dat op dat moment het goedkoopst is. Hierdoor kan het zijn dat u regelmatig een ander merk krijgt. Dit kan betekenen dat de verpakking anders is of dat uw medicijn er anders uitziet. Als ze dit doen vergoeden zij alleen dit gekozen merk en kunt u andere merken alleen vergoed krijgen in het geval van een medische noodzaak. Sinds de grootschalige invoering van het beleid in 2008 heeft het de zorgverzekeraars veel geld bespaard, maar de gevolgen voor patiënten zijn tot dusver niet onderzocht. Het is echter wel belangrijk te weten wat de gevolgen zijn van dit beleid voor de patiënt (positief of negatief). Dit is dan ook waar ik met mijn onderzoek een begin mee wil maken.

Mijn vraag aan u is of u deel zou willen nemen aan dit onderzoek door middel van een interview over uw ervaringen. Een interview zal ongeveer een uur duren. De interviews zullen plaatsvinden in de periode van 17 februari tot en met 4 maart. U kunt u aanmelden door het aanmeldformulier ingevuld terug te sturen met behulp van de antwoord envelop of een email te sturen naar het email adres aan het eind van deze brief. Indien u niet geïnterviewd wilt worden, wil ik u vragen uw reden hiervoor aan te geven op de achterzijde van het aanmeldformulier (het afmeldformulier) en dit eveneens met behulp van de antwoord envelop terug te sturen.

U krijgt deze brief via uw apotheek, die bereid was om aan dit onderzoek een bijdrage te leveren. Met het terugsturen van het aanmeldformulier of het zenden van een email geeft u uw apotheker toestemming om uw contactgegevens aan mij door te geven. Deze gegevens zullen uitsluitend gebruikt worden om contact met u op te nemen voor het maken van een afspraak. Uiteraard zal alles wat u vertelt tijdens de interviews vertrouwelijk worden behandeld wat betekend dat ook uw apotheker geen inzicht krijgt in wat u mij vertelt.

Ik hoop u hiermee voldoende geïnformeerd te hebben en dat u bereid bent deel te nemen. Als u nog vragen heeft over het onderzoek die u graag beantwoord krijgt voordat u zich aanmeld voor deelname kunt u vrijblijvend contact met mij opnemen via het nummer 0641573087 of het emailadres ilse.pastoors@wur.nl. Hopelijk tot snel.

Met vriendelijke groet,

Ilse Pastoors

Appendix IV: Interview topic list

1. Introductie

- Achtergrond onderzoek
- Alle informatie wordt vertrouwelijk en anoniem behandelt
- Toestemming voor opname en quoten.
- Informed consent formulier laten tekenen
- Opbouw en tijdsduur interview

2. Achtergrondinformatie

- Leeftijd:
- Geslacht:
- Woonsituatie (alleen, samen, etc.):
- Etniciteit:
- Hoogst genoten opleiding:
- Aantal medicijnen:
- Verzekering:

3. Kennis preferentiebeleid

- Had u gehoord van de term preferentiebeleid voordat u mijn uitnodiging las?
- Wat is volgens u het doel van het beleid?
- Hoe werkt het beleid volgens u? Wat wordt er gedaan om het doel te bereiken?

2. Concrete veranderingen

- Wat heeft u concreet gemerkt van de invoering van dit beleid in 2008 wat betreft uw medicatie?
    - Merkwisselingen
    - Hoe vaak?
    - Concrete veranderingen

3. Attitude beleid en gevolgen

- Wat vindt u van het beleid?
    - Doel versus werking
    - Verklaring
- Wat zijn de gevolgen voor u als patiënt geweest van de veranderingen met het beleid?

4. Effectiviteit medicijnen

- Maakt het voor u wat uit welk medicijn u krijgt?
- Heeft u de indruk dat er verschillen zijn in bijwerkingen of effectiviteit tussen verschillende merken?
- Heeft u vertrouwen in de effectiviteit en kwaliteit van de medicijnen die u ontvangt?
    - Basis vertrouwen

5. Medicatie management

- Heeft het wisselen van de merken invloed op uw inname/routines/motivatie voor het innemen van de medicatie?
    - Indien invloed, wat is de voornaamste oorzaak hiervan?
- Hebt u een vaste routine?
    - Indeling routine
    - Therapietrouw

6. Patiënt tevredenheid

- In hoeverre heeft het beleid enig effect gehad op hoe tevreden u bent met uw medicatie/behandeling?
    - Verklaring
    - Basis tevredenheid

7. Relatie apotheker

- Welke rol speelt uw apotheker in uw behandeling?
    - Verandering rol sinds invoering
- Heeft de invoering van het beleid invloed gehad op de kwaliteit van voorlichting/begeleiding door de apotheker?
    - Gevolgen
- Indien klachten: Heeft u in de apotheek wel eens uw beklag gedaan over de door u ervaren gevolgen van het beleid?
    - Afwerking klachten
    - Tevredenheid over afwerking
    - Invloed op vertrouwen
- Heeft het beleid enig effect gehad op hoe tevreden u bent met uw apotheker?
    - Basis tevredenheid

8. Attitude bijbetalen

- Het preferentiebeleid is bedoeld om geld te besparen. Als u mocht kiezen, zou u dan wisselen van medicatie, of liever hetzelfde medicijn krijgen en het verschil in kosten bij betalen?
    - Verklaring

9. Afsluiting

- Zijn er nog gevolgen met betrekking tot het beleid die u nog niet heeft kunnen benoemen, maar graag nog zou willen toevoegen?
- Samenvatting
- Bedanken

Appendix V: Coding scheme

Below the codes used are given. The constructed codes should be regarded as the literature based responses. The in vivo codes are the actual responses. In some cases the in vivo codes given portrait the explanation given with the response. For instance, people were positive about the policy because of the high costs etcetera, where others were negative for reasons of confusions etcetera.

Topic	Category	Constructed codes	In vivo codes
Knowledge of policy	Aim	Reduce costs	Costs, money, expensive, expenditurs, cheaper
		Other	No idea
	Working principles	Cheaper brands	Cheaper, not the original
		Changing brands	Other producers, other pills, different brand,
		Price agreements	*not mentioned*
		Medical necessity	*not mentioned*
		Quality guarantee	Same working ingredient
Attitude	Preference policy	Positive	Costs, similar effect, no negative experience
		Negative	Confusion, user friendliness, quality, security, side effect
	Posibility to pay extra	Positive	For quality, habituation
		Negative	Financial reasons, unnecessary, trust in provider
Concrete changes	Side effects	-	pharmaceutical excipients, lower quality, dizzyness, habituation, fear
	Waiting times	In pharmacy	Busy
		Medication retrieval	Stocking, return later
	Packaging	Apppearance	Different, habituation, user friendliness, clarity,
	Pills	Shape and colour	Different shape, different colour
	Mistakes pharmacist	Wrong medication	*not mentioned*
		Wrong brand	More expensive brand
	Less suitable medication	Form	*not mentioned*
		Dose	*not mentioned*
	Other	-	Increased dose, changing names

Medication management	Routines	Standard moment	Evening, breakfast, diner, when waking up
		No routine	*Not mentioned*
	Maintaining routines	No problem	Habit, important
		Hard	Sometimes, visits, parties, holidays
	Influence policy	Adherence	*not mentioned*
		Effort to maintain	Confusion, more attention, habitation, insecurity, packaging
Pharmacist-patient relationship	Role pharmacist	Information	Communication, limited, advise
		Provision medication	-
		Emotional support	*not mentioned*
		Other	monitoring
	Change in role	Yes	more information
		No	the same
	Change in quality of advise and guidance	Better	more support, advise, attention pharmacist
		Worse	Less communication
		Similar	no change
	satisfaction with pharmacist	More	*Not mentioned*
		Less	
		- Mistakes	*Not mentioned*
		- Side effects	*Not mentioned*
		- Service	Bad communication
		Similar	Great pharmacist, trust, never any problems, service
	Trust in pharmacist	More	*Not mentioned*
		Less	Not honest
		Similar	Necessity to trust
Patient satisfaction	Satisfaction medication	Satisfied	no complaints, good medication
		Not/less satisfied	
		- side effects	*Not mentioned*
		- Efficacy	Lower perceived efficacy
		- Other	Frequently changing brands
Medication efficacy beliefs	Prefered brand	Yes	Dislike change, security
		No	No knowledge of, trust in provider, same effect
	Trust in effect and quality	Yes	Effect, trust in provider, easy personality patient
		No	More alert after change, differences
	Differences in effifacy and Quality	Yes	Different ingredients, experience
		No	Not noticed