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[Information needs concerning medication of cardiovascular patients]

a descriptive study

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Abstract

Title: Information needs, concerning medication, of cardiovascular patients.

Background: The number of patients with chronic cardiovascular diseases is increasing. Nurses frequently coach these patients, with medication as an important topic. Providing patients with information can improve satisfaction, which can result in higher medication adherence. The information currently given, may not be in accordance with patients' needs.

Aim: To gain insight in the information need concerning medication of patients with chronic cardiovascular diseases who are coached by nurses at an outpatient clinic of a general hospital.

Research questions: 1)What is the satisfaction of patients with provided information? 2)What is the extent of information desired? 3)How and by whom should information be presented?

Method: A descriptive, cross-sectional study. Participants were recruited through convenience sampling, at one out-patient clinic of a Dutch general hospital. Participants were diagnosed with coronary heart disease, cerebrovascular disease or peripheral arterial disease in the last year, aged ≥ 18 years and using ≥ one cardiovascular medication(s). The 'Satisfaction with Information about Medicines Scale' and the 'Extent of Information Desired Scale' were used to answer the questions.

Results: A sample of 36 patients was available. Twenty-five patients participated, 48% was non-satisfied with provided information and about 50% was tended to want more information. The hospital (doctor) and the general practitioner were preferred to present information.

Conclusion: Information must be improved to reach higher satisfaction rates. The extent of information and the preferred presentation differed within the population and confirmed that needs are a personally issue. More cooperation among healthcare workers and a constant dialogue with patients is recommended.

Recommendations: Research is recommend to investigate the information need after the first year of sickness and of patients with different cardiovascular diseases. The use of measurement scales, to describe individual needs, can be investigated.

Keywords: (Cardio)vascular, information need, medication, medication adherence.

Nederlandse samenvatting

Titel: De informatiebehoefte, betreffende medicatie, van patiënten met een cardiovasculaire aandoening.

Inleiding: Het aantal patiënten met een chronische, cardiovasculaire aandoening neemt toe. Vaak begeleiden verpleegkundigen deze patiënten, waarbij medicatiegebruik een belangrijk onderwerp is. Wanneer patiënten informatie over hun medicatie krijgen, kan dit hun tevredenheid bevorderen, dit kan resulteren in hogere medicatietrouw. De gegeven informatie, is mogelijk niet in overeenstemming met de patiëntbehoefte.

Doel: Inzicht verkrijgen in de informatiebehoefte, betreffende medicatie, van patiënten met een chronische cardiovasculaire aandoening, die begeleid worden door een verpleegkundige op een polikliniek binnen een algemeen ziekenhuis.

Onderzoeksvragen: 1)Hoe tevreden zijn patiënten met ontvangen informatie? 2)Wat is de gewenste mate van informatie? 3)Hoe en door wie moet informatie gegeven worden?

Methode: Een beschrijvende, cross-sectionele studie. Middels een gelegenheidssteekproef werden participanten geworven binnen één polikliniek van een Nederlands, algemeen ziekenhuis. Participanten hadden sinds het laatste jaar een coronaire hartziekte, cerebrovasculaire ziekte of een perifere vaatziekte, waren tenminste 18 jaar en gebruikten minimaal één cardiovasculair medicijn. De 'Satisfaction with Information about Medicines Scale' en de 'Extent of Information Desired Scale' werden gebruikt om de vragen te beantwoorden.

Resultaten: Een steekproef van 36 patiënten was beschikbaar. Vijfentwintig patiënten participeerden, 48% was niet tevreden met de gegeven informatie, ongeveer 50% had behoefte aan meer informatie. Participanten wilden informatie het liefst in het ziekenhuis (arts) of bij de huisarts ontvangen.

Conclusie: Informatie moet verbeterd worden om tevredenheid te bevorderen. De mate van gewenste informatie en de voorkeur voor presentatie varieerden, dit bevestigt dat behoeften persoonlijk zijn. Meer samenwerking tussen gezondheidswerkers en een constante dialoog met de patiënt wordt aanbevolen.

Aanbevelingen: Onderzoek is nodig om de informatiebehoefte na het eerste ziektejaar in kaart te brengen, alsmede de behoefte van patiënten met verschillende cardiovasculaire ziekten. Het gebruik van meetinstrumenten, om de individuele behoeften te beschrijven, kan worden onderzocht.

Trefwoorden: (Cardio)vasculair, medicatie, informatiebehoefte, medicatietrouw.

Background

Cardiovascular diseases (CVD) are the second cause of illness and death in the Netherlands (1). In 2009, 30% of all deaths in the Netherlands were caused by CVD (2). The most common CVD are coronary heart disease (CHD), cerebrovascular disease (CD) and peripheral arterial disease (PAD) (3). To establish optimal and cost-effective primary and secondary prevention for patients with CVD, a Dutch guideline for cardiovascular risk management was developed. This guideline describes the importance of different healthcare providers in prevention for patients with CVD. (3)

Due to better acute care, more patients survive a first cardiovascular event, resulting in an increased number of patients with chronic CVD (4). These patients are considered as high-risk patients to develop new cardiovascular events (3). This risk can be influenced by different physical cardiovascular risk factors such as diabetes mellitus (DM), hypertension and hyperlipidaemia (3,5,6). These risk factors can be lowered by an optimal treatment (3,7,8). Treatment by medication is a way of influencing the risk factors (3,9,10), however this can only be effective if patients are adherent to their medication regimen (11-13). Medication adherence is defined as 'the extent to which a patient acts in accordance with the prescribed interval and dose of a dosing regimen' (14).

Different studies have shown that medication non-adherence is an important problem. Depending on the population, the prescribed regimen, and the definition or measure of medication adherence that was used, adherence varies from 10% to 80%. (15-17) Adherence to cardiovascular medication can be lowered as a result of the life-long medication use, regimen complexity, side effects, polypharmacy and doubt as to the need of medication use (15,18). Low medication adherence can result in ineffective treatment of cardiovascular risk factors and can increase the risk of developing new cardiovascular events (3,5,6,11).

In many general hospitals and general practices, nurses are involved in secondary prevention of patients with CVD (19). Nurses discuss with the patient about names, doses, side-effects and intervals of medication. Adherence to therapy is also an important issue during these consultations, as described in the Dutch guideline for cardiovascular risk management. (3,20) Different (nursing) interventions have been developed to improve medication adherence in patients with CVD. Examples are an intervention with nurse-led support, a feedback intervention and the use of an education tool. (21-29) Despite these interventions, a recent systematic review described an overall adherence to cardiovascular medication of 57.5% (30). Further improvement of medication adherence is required to reach

effective treatment of cardiovascular risk factors (11), resulting in a lower risk of developing new cardiovascular events (3,5,6).

Evidence showed that medication adherence is more likely for patients who are satisfied with provided care (31). One of the most important patients' needs to become satisfied, is the need of information concerning their medication (24,32-39). It is assumable that providing patients with information concerning their medication can result in higher satisfaction. This can lead to higher medication adherence, resulting in a more optimal treatment of risk factors of CVD. (3,9,10,31,33-38,40) Different studies suggest that interventions such as giving verbal and written information can improve adherence to cardiovascular medication (41,42). This is supported by the theory that behavioural change cannot take place without attention to the gaps in knowledge and skills of patients (43). Providing patients with information can have a positive effect on coping with healthcare events, as described by Johnson and Leventhal in their 'model of self-regulation' (44). This theory indicates the importance of a combination of procedural information, sensory information and behavioural instruction (44,45). However, the information given by healthcare providers to improve medication adherence may not be in accordance with patients' information needs due to differing perspectives between healthcare providers and patients (46,47).

To get more insight in the information needs of patients, it is important to know patients' satisfaction with provided information (48,49), the extent of desired information (50) and the way information should be presented (how and by whom) (51).

Rationale, aim and research questions

Rationale

Patients with CVD are frequently coached by nurses at outpatient clinics of general hospitals. The consultations mostly take place in the first year after surviving a cardiovascular event. One of the topics is cardiovascular medication, as described in the Dutch guideline for cardiovascular risk management. Providing patients with information can positively affect coping and can improve satisfaction, which can result in higher medication adherence. The information currently given at outpatient clinics, may not be in accordance with patients' information needs. In this study the information needs concerning medication of patients with chronic CVD was investigated.

Aim

The aim of this study was to gain insight in the information needs concerning medication of patients with chronic CVD who are coached by nurses at an outpatient clinic of a general hospital. In order to develop interventions which provide these patients with information, concerning medication, adapted to their needs.

Research question

What are the information needs concerning medication of patients with chronic cardiovascular diseases who are coached by nurses at an outpatient clinic of a general hospital?

- *What is the satisfaction of patients with provided information?*
- *What is the extent of information desired?*
- *How and by whom should information be presented?*

Method

Design

This quantitative study was descriptive, with a cross-sectional design. The aim of the study was to gain insight in the information needs, concerning medication, of patients with CVD. Providing patients with information they need is in line with the model of self-regulation. Providing patients with information can positively affect their coping with healthcare events and can improve their satisfaction. (24,32-39,44,45) By using a descriptive and cross-sectional design, the information needs of patients were described, at one moment in time (52,53).

Setting and sample size

The study was conducted from January to May 2012 at an outpatient clinic of a general hospital in The Netherlands. This outpatient clinic is specialized in care for patients with CVD, who survived a cardiovascular event in the last year. Inclusion criteria included diagnoses of CHD, CD or PAD, aged ≥ 18 years and using ≥ one cardiovascular medication(s). Patients who were unable to fill in a questionnaire were excluded.

A sample size with a minimum of 30 participants is sufficient to guarantee that the sample distribution of the mean approaches the normal distribution closely (52). Following this theory, in this study a sample size of 30 participants seemed to be sufficient. Taking into account the number of patients normally visiting the out-patient clinic, participants were recruited through convenience sampling.

Procedure

Patients of the outpatient clinic were screened by their nurse to determine their eligibility for the study. Nurses were instructed by the researcher about the recruitment of patients and the use of the inclusion and exclusion criteria. This instruction was both verbal and written for every individual nurse. Special attention was given to non-influencing the patients whether to participate in the study or not.

Following identification of eligible patients, the nurse explained the study purpose to the patient and asked whether the patient wanted to receive an information letter and the questionnaire. The information letter described the aim of the study and the method of data analysis. In the letter was also indicated that patients were completely free to participate in the study or not. Patients completed the questionnaire at home after they gave written consent. Following this method, patients were able to think about participating in the study.

Variables and measurements

Following the research question, three variables were measured in this study.

[1] Satisfaction with provided information;

[2] Extent of desired information;

[3] Presentation of information.

Data were collected by a questionnaire (appendix 1), which consisted of demographic questions, the 'Satisfaction with Information about Medicines Scale' (SIMS) and the 'Extent of Information Desired Scale' (EID). The demographic questions provided data to describe the populations' characteristics. The SIMS measured the satisfaction with provided information concerning medication (48). The EID indicated the extent of desired information concerning medication, how information should be presented and by whom (51,54,55).

Satisfaction with provided information

The SIMS is a 17-item questionnaire, each item refers to a particular aspect of medication use. The scale consists of two subscales: 'action and usage' (AU) (items 1-9) and 'potential problems of medication' (PPM) (items 10-17). (48) The SIMS was translated into Dutch, using the translate-and-translate-back method (56). The Dutch scale was used in earlier studies, sample sizes ranged from 149 to 648 participants (47,56,57). The questionnaire was validated, internal consistency was sufficient (Cronbach's α = 0.81 to 0.94, in English and Dutch populations) (47,48). The items of the SIMS are scored on a Likert-scale (too much, about right, too little, none received, none needed) and were coded analogue to the English version (48). 'Too much', 'too little' and 'none received' were classified as unsatisfied with given information (score 0). 'About right' and 'none needed' were classified as satisfied with given information (score 1).

Extent of desired information

The EID consists of six structured items and in an earlier study, five (half)open questions were added to the scale (50,58,59). The structured items and the first (half)open question measure the extent of desired information (58,59). The EID is part of a larger scale (other questions were irrelevant for this study) and was derived through a factor analysis (54). The EID was translated into Dutch, using the translate-and-translate-back method (58). The Dutch EID was used several times, sample sizes ranged from 43 to 279 participants (58,59). Internal consistency of the structured items of the EID was acceptable (Cronbach's α = 0.78 and 0.73, in English and Dutch populations) (50,58). The structured items are scored on a Likert-scale (1=strongly disagree;2=disagree;3=uncertain;4=agree;5=strongly agree). Scores of negatively formulated items (3, 5 and 6) were inversed before summation.

A previous study provided insight into possible answers to the (half)open questions. The answers were coded and divided into topics (51,58). In this study answers to the first (half)open questions were divided into the same topics (side effects, how medication works what medication is taken for, interactions, if medication is harmful, if medication is addictive) (58).

Presentation of information

The second to fifth (half)open questions of the EID measure how and by whom information should be presented (58,59). Answers to these questions were divided into topics, as described earlier (question 2: verbal, written; question 3: doctor, nurse, pharmacist; question 4: hospital, pharmacy, at home, general practitioner (GP); question 5: yes, no) (58).

Statistics

Data were analyzed using Statistical Package for the Social Sciences 20.0.

Satisfaction with provided information

The outcomes of the SIMS were analysed twofold.

Firstly, total scores of all 17 items and of the two subscales were calculated. Subsequently these scores were divided around the mean or median. Dividing scores around the mean or median is regarded as a suitable method for descriptive analyses, based on earlier research (47,50,59). Afterwards was determined how many participants were 'high scorers' (above mean/median) and how many participants were 'low scorers' (below mean/median).

In this study high scorers were defined as satisfied with provided information and low scorers were defined as unsatisfied with provided information (47).

Secondly, every item was examined whether participants were satisfied or unsatisfied with given information to identify which information, in opinion of the participants, was lacking.

Extent of desired information and presentation of information

Scale scores of the EID were calculated by adding up the item scores (58). The mean or median of the structured items was calculated, as described in the previous paragraph. Subsequently was determined how many participants were 'high scorers' (above mean/median) en how many participants were 'low scorers' (below mean/median). In this study high scorers were defined as those who tended to want more information and low scorers were those who tended to want less information (50).

The answers to the (half)open question were described with frequencies and percentages of described topics.

Ethics

The study complied with the Declaration of Helsinki and was not subjected to the Medical research Involving Human Subjects Act, because participants were not subjected to procedures en were not required to follow rules of behavior. The Medical Research Ethics Committee was asked for their opinion, they agreed that this was the right way to proceed.

Results

Characteristics of the population

Thirty-eight patients met the inclusion criteria. Two of these patients were not interested in the study, so a sample size of 36 participants was available. Twenty-five participants completed the questionnaire. Reasons of non-response were: sickness (1x), feeling unable to complete the questionnaire (1x), negative experience in the hospital (1x) and unknown (8x). The mean age of the participants was 63 years (range 45–86), they used a mean of 5.7 medications (range 3–17) (table 1). Almost half (48%) of the participants was diagnosed with CHD, 52% with PAD and 12% with CD. Of the participants, 44% was diagnosed with another chronic disease.

>>> Insert table 1 <<<

Satisfaction with provided information

Chronbach's alpha of the SIMS in this population was 0.94. The data were not normally distributed, so the overall median score was calculated and was 11 (range 0–17) (table 2). Forty percent of the participants scored above the median and were defined as satisfied with provided information. The median score of subscale 'AU' was 7 (range 0–9) and 5 (range 0–8) for subscale 'PPM'. For both subscales, 44% of the participants scored above the median and were defined as satisfied with provided information.

Seven participants were completely satisfied with all items of the SIMS. The option 'too much' was never answered by the participants. Of the subscale 'AU', the items '*how to get a further supply*' and '*how to use your medication*' were scored the most positive (table 3). The items '*how long it will take to act*' and '*how it works*' were scored the most negative.

Of the subscale 'PPM', the items '*whether you can drink alcohol whilst taking it*' and '*what you should do when you forget to take a dose*' were scored the most positive. The items '*whether the medication has unwanted effects (side effects)*', '*whether the medication will affect your sex life*' and '*whether the medication interferes with other medication*' were scored the most negative.

>>> Insert table 2 and 3 <<<

Extent of desired information

Chronbach's alpha of the structured items of the EID in this population was 0.85. The data were normally distributed, so the mean was calculated and was 21.6 (range 11–29). Fifty-two percent of the participants scored above the mean and were defined as those who tended to want more information. Forty-eight percent of the participants scored below the mean and were defined as those who tended to want less information. Information concerning '*side effects*' was desired the most (table 4), followed by '*how long to take this medication*'.

Presentation of information

Of the participants, 48% preferred written information and 56% preferred verbal information (table 4). Some participants preferred both written and verbal information. Forty percent of the participants preferred the doctor to give information, 20% preferred the pharmacist. Other participants preferred a nurse, GP or the prescriber to give information (all three 8%). Of the participants, 80% wanted information at the hospital or at the GP and 8% liked to sit down with a pharmacist at the hospital.

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Discussion, conclusion and recommendations

Discussion

This study showed that almost half of the participants were unsatisfied with provided information concerning medication. Information lacking the most, was concerning '*how it works'*, '*how long it will take to act'*, '*whether the medication will affect your sex life'*, '*whether the medication interferes with other medication*, '*how you can tell if it is working*' and '*whether the medication has unwanted effects*'. More than half of the participants were tended to want more information. Information concerning '*side effects'* and '*how long to take this medication*' was desired the most. There was no clear preference for written or verbal information. The doctor was preferred the most by the participants to present the information and they liked to receive the information at the hospital or at the GP.

These results indicate that information concerning medication needs to be improved. Currently provided care is not fully in accordance with patients' needs. In another study among patients with DM, 65% was satisfied with the provided information (57). In a study among patients who use cardiovascular medication(s), 42% was satisfied with information received (47). However in that study, the items '*what you medication is called*' and '*whether the medication will affect your sex life*' were excluded, what complicates a total comparison of the studies (47). Although a full comparison of the studies is difficult, it can be concluded that achieve a higher rate of satisfaction must be an important goal of healthcare workers. Satisfaction can lead to higher medication adherence. Patients who were counseled individually, who were informed about medication, and who had the opportunity to discuss questions were more satisfied. (31,60)

The results also advocate for a more individual approach of every patient, because of the varying outcomes within the population. This is in accordance with other studies, individual patients desired different levels of information and patient-centered advice seemed to be effective (24,34). Some patients do need information concerning medication, other patients leave it up to their doctor and there is also a group who would like to understand their situation and want to learn as much about it (61). Adapt information to patients' individual needs seems to be the most appropriate way of giving information concerning medication. This is also stated by the 'model of self-regulation', which indicates the importance of a combination of procedural information, sensory information and behavioural instruction for every individual patient (44). Maybe measurement scales can be used, to describe patients' individual needs.

The outcomes of the SIMS and the EID indicate the importance of information concerning side effects. This was stated in other studies among patients with CVD or DM (47,60,62).

Many patients preferred to receive as much information as possible about the side effects (60). Patients also seemed to have a lot of questions concerning side effects (63). Another study showed that only 20% of the patients using statins had an idea about side effects (62). It seemed that lack of information can lead to inappropriate use of medication and side effects can interfere with medication adherence (32,38).

Participants preferences concerning the way of presentation were stated by another study, but they found a greater group who preferred their nurse to give information and more participants who liked to sit down with a pharmacist at the hospital (58). Another study showed that the GP was the most important source of information concerning cardiovascular medication, followed by the pharmacist (47). There is no clear reason for these differences, but this may be an indication for a more multidisciplinary approach of patients with CVD, to guarantee that patients receive complete information concerning their medication.

This study had some limitations. The study was performed at only one outpatient clinic, what can influence the generalizability of the results.

A sample-size of 30 participants was not reached, but the method of dividing scores around the mean or median seemed to be a valid method to describe the results of the small sample.

Eight non-responders dropped out because of unknown reasons and therefore their characteristics are unknown. It cannot be said if these patients represent a particular group and how they influenced the results. Patients were free to give a reason for non-response, to guarantee a free (non-)participation in the study.

The results can be influenced by recall-bias, because answers to the questionnaire were based on participants' memories.

In this observational study, the differences of information needs among patients with different kinds of diseases cannot be distinguished. In addition, information needs may change over time. These differences were not investigated because of an insufficient sample size to compare groups.

A strength of this study was the response-rate of almost 70%, which was in all probability achieved due to the personal approach of the patients by their own nurse and the researcher. A personal approach can lead to giving socially desired answers, this was limited by indicating that data were analysed anonymously.

Conclusion

This study among a small population of patients with chronic CVD showed that currently provided care is not fully in accordance with patients' needs. Information, concerning medication, needs to be improved to reach higher satisfaction rates. Furthermore, the extent of desired information and the preferred way of presentation differed within the population. This confirmed that information need is an individual and personal issue. More consultation and cooperation among healthcare workers and a constant dialogue with every individual patient is recommended.

Recommendations

It is recommend to investigate in further research the information need after the first year of sickness and the information need of patients with different kinds of CVD. Also the use of measurement scales, like the SIMS or EID, to describe individual information needs of patients can be investigated.

Acknowledgement

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Tables

Table 1: Characteristics of the participants (N=25)

Characteristic	
Age (years) (Mean + SD)	63 (± 11.17)
Gender (N, %)	
Males	18 (72%)
Females	7 (28%)
Nationality (N, %)	
Dutch	25 (100%)
Highest educational level* (N, %)	
Low	7 (28%)
Medium	14 (56%)
High	3 (12%)
Unknown	1 (4%)
Diagnosis** (N, %)	
Coronary heart disease	12 (48%)
Peripheral arterial disease	13 (52%)
Cerebrovascular disease	3 (12%)
Number of medication (Mean + SD)	5.7 (± 3.16)
Year of diagnosis (N, %)	
2011	21 (84%)
2012	4 (16%)
Other chronic diseases (N, %)	
*Yes**/****	11 (44%)
No	13 (52%)
Unknown	1 (4%)

*Education: Low (elementary education); Medium (high school or middle-level applied education); High (higher professional or academic education)

** More than one answer possible

***Other chronic diseases were Diabetes mellitus (5x), Chronic Obstructive Pulmonary Disease (3x), Hypertension (3x) and Hypercholesterolaemia (1x)

Table 2: Satisfaction with provided information (N=25)

	Median (range)	- Below median N (%) - Above median N (%) - Exactly median N (%)
SIMS (total)	11 (0 – 17)	- 12 (48%) - 10 (40%) - 3 (12%)
SIMS (AU)*	7 (0 – 9)	- 11 (44%) - 11 (44%) - 3 (12%)
SIMS (PPM)*	5 (0 – 8)	- 11 (44%) - 11 (44%) - 3 (12%)

*AU = action and usage; PPM = potential problems of medications

Table 3: satisfaction with every individual item (N=25)

Items	Satisfied N (%)
Subscale 1: action and usage	
How to get a further supply	*21 (84%)*
How to use your medication	*21 (84%)*
What your medication is for	*20 (80%)*
What you medication is called	*18 (72%)*
How long you will need to be on your medication	*17 (68%)*
What it does	*15 (60%)*
How you can tell if it is working	*13 (52%)*
How long it will take to act	*12 (48%)*
How it works	*11 (44%)*
Subscale 2: potential problems of medication	
Whether you can drink alcohol whilst taking it	*19 (76%)*
What you should do when you forget to take a dose	*16 (64%)*
What you should do if you experience unwanted side effects	*14 (56%)*
What are the risks of you getting side effects	*14 (56%)*
Whether the medication will make you feel drowsy	*14 (56%)*
Whether the medication has unwanted effects (side effects)	*12 (52%)*
Whether the medication will affect your sex life	*12 (48%)*
Whether the medication interferes with other medication	*12 (48%)*

Table 4: extent of desired information and presentation of information (N=25)

Item	Topics	N (%)
1. What kind of information about your medication do you want? *	Side effects	7 (28%)
	How medication works	3 (8%)
	What medication is taken for	1 (4%)
	Interactions	1 (4%)
	If medication is harmful	1 (4%)
	If medication is addictive	0 (0%)
	Other:	
	- *How long to take this medication*	4 (16%)
	- *Everything I want to know is described in the leaflet*	3 (12%)
	- *Everything*	2 (8%)
	- *As much as possible*	1 (4%)
	- *If there is a follow-up*	1 (4%)
	Unknown	5 (20%)
2. How do you want your information to be presented? *	Verbal	14 (56%)
	Written	12 (48%)
	Other:	
	- *By E-mail*	1 (4%)
	Unknown	3 (12%)
3. Who would you like to give you information about you medication? *	Doctor	10 (40%)
	Pharmacist	5 (20%)
	Nurse	2 (8%)
	Other:	
	- *General practitioner*	2 (8%)
	- *Prescriber*	2 (8%)
	- *Doctor or other expert*	1 (4%)
	- *Doesn't matter*	1 (4%)
	- *Expert*	1 (4%)
	Unknown	4 (16%)
4. Where would it be best to have the information about your medication presented? *	Hospital	10 (40%)
	General practitioner	10 (40%)
	Pharmacy	8 (32%)
	At home	1 (4%)
	Other:	
	- *Prescriber*	3 (12%)
	- *Doesn't matter if there is sufficient time and the opportunity for explanation and to discuss my questions*	1 (4%)
	- *Doesn't matter, no difference*	1 (4%)
	Unknown	1 (4%)
5. Would you like to sit down and talk about your medication with a pharmacist at the hospital?	No	20 (80%)
	Yes	2 (8%)
	Unknown	3 (12%)

* More than one answer possible

Appendix 1: questionnaire

Onderdeel 1
Bij de *vragen met een sterretje (*) mag u aankruisen wat voor u van toepassing is. De overige vragen mag u invullen in cijfers.*

1. Geslacht*

☐ Vrouw ☐ Man

2. Nationaliteit*

☐ Nederlands ☐ Anders, namelijk ....

3. Leeftijd
……….. jaar

4. Hoogst afgeronde opleiding*

☐ Lager onderwijs (basisschool)

☐ Lager beroepsonderwijs

☐ Middelbaar algemeen onderwijs (bijvoorbeeld MAVO)

☐ Middelbaar beroepsonderwijs

☐ Voortgezet algemeen onderwijs (bijvoorbeeld HAVO/VWO)

☐ Hoger beroepsonderwijs

☐ Universitair onderwijs

☐ Anders, namelijk...

5. Voor welke aandoening wordt u op de vaatrisicopoli behandeld? (meerdere antwoorden mogelijk)*

☐ Aandoening van het hart (bijvoorbeeld hartinfarct, hartfalen

☐ Aandoening van de bloedvaten (bijvoorbeeld etalagebenen, afsluiting bloedvat)

☐ TIA / hersenbloeding / herseninfarct

☐ Anders, namelijk...

6. Hoeveel soorten medicijnen gebruikt u?
……….. Soorten medicijnen

7. Hoelang hebt u deze aandoening(en) al?
Sinds ……….. (jaartal)

8. Hebt u nog andere chronische aandoeningen?*

☐ Nee

☐ Ja, namelijk ....

Onderdeel 2

De volgende vragen gaan over de voorlichting die u hebt ontvangen over uw medicijn(en). Geef voor iedere vraag aan of u over dat onderdeel voldoende voorlichting hebt gekregen.

Als u meer dan één medicijn gebruikt voor uw hart en/of vaataandoening dan geeft u uw algemene gevoel over de voorlichting weer betreffende al deze medicijnen.

Dit is een voorbeeld:

Kreeg u voldoende <u>voorlichting</u> over:	Te veel	Voldoende	Te weinig	Niet gekregen	Was niet nodig
Of u mag autorijden met dit medicijn		**x**			

Dit betekent dat u <u>voldoende</u> voorlichting hebt gekregen over *of u mag autorijden met dit medicijn*.

Kreeg u voldoende voorlichting over:	Te veel	Voldoende	Te weinig	Niet gekregen	Was niet nodig
Wat de naam van uw medicijn is					
Waarvoor uw medicijn is					
Wat uw medicijn doet					
Hoe uw medicijn werkt					
Hoe lang het duurt voor uw medicijn werkt					
Hoe u merkt of uw medicijn werkt					
Hoe lang u uw medicijn moet gebruiken					
Hoe u uw medicijn moet gebruiken					

Kreeg u voldoende voorlichting over:	Te veel	Voldoende	Te weinig	Niet gekregen	Was niet nodig
Hoe u uw herhaalmedicijn krijgt					
Of het medicijn bijwerkingen heeft					
Wat de risico's zijn dat u bijwerkingen krijgt					
Wat u moet doen als u bijwerkingen krijgt					
Of u alcohol mag drinken terwijl u dit medicijn slikt					
Of er wisselwerkingen zijn met andere medicijnen					
Of het medicijn u suf kan maken					
Of het medicijn uw seksleven beïnvloedt					
Wat u moet doen als u een dosis bent vergeten in te nemen					

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1 July 2012

Onderdeel 3

Geef bij de volgende vragen aan wat voor u van toepassing is. U omcirkelt wat uw gevoel het beste weergeeft. Hieronder zijn de antwoordmogelijkheden en een voorbeeld weergegeven:

Antwoordmogelijkheden:	
- -	helemaal niet mee eens
-	niet mee eens
0	weet niet, geen mening
+	mee eens
+ +	helemaal mee eens

Dit is een voorbeeld:

Ik wil precies weten welke bijwerkingen medicijnen kunnen geven.

- -	-	0	(+)	+ +

Dit betekent dat u het <u>eens</u> bent met de stelling

---

1. <u>**Ik lees zelf zoveel mogelijk over mijn medicijnen.**</u>

- -	-	0	+	+ +

2. <u>**Ik wil zoveel mogelijk weten over mijn medicijnen.**</u>

- -	-	0	+	+ +

3. <u>**Te veel weten is niet goed.**</u>

- -	-	0	+	+ +

4. <u>**Eigenlijk kan je nooit genoeg weten over medicijnen.**</u>

- -	-	0	+	+ +

5. <u>**Ik heb eigenlijk geen behoefte aan meer informatie over mijn medicijnen.**</u>

- -	-	0	+	+ +

6. <u>**Wat u niet weet, baart u ook geen zorgen.**</u>

- -	-	0	+	+ +

Tenslotte volgen nu nog 5 vragen waarop u zelf uw antwoord mag invullen.

Vraag 1: Welke informatie wilt u over uw medicijnen? Waarom deze informatie?

………

……

Vraag 2: Hoe zou u graag informatie over uw medicijnen krijgen (bijvoorbeeld schriftelijk, mondeling, beide, andere middelen)?

………

……

Vraag 3: Van wie zou u graag informatie over uw medicijnen krijgen? Waarom van deze persoon?

………

……

Vraag 4: Waar zou de informatie over uw medicijnen het best gegeven kunnen worden (in het ziekenhuis, bij u thuis, in de apotheek in uw buurt, bij de huisarts)? Verklaar uw voorkeur.

………

……

Vraag 5: Zou u graag de apotheker in het ziekenhuis willen spreken over uw medicijnen? Waarom?

………

……...............