# Why do patients consult the general practitioner? Determinants of their decision

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SUMMARY. In order to obtain more information about the reasons why patients consult their general practitioner 1000 patients completed a questionnaire in the waiting rooms of eight general practices. After the consultation the patients received a second questionnaire. The aim of the study was to determine why people decide to consult their general practitioner about one complaint but not about a second complaint. Both questionnaires were based on the health belief model, augmented by three other factors: the perceptions patients have of their own abilities to cope with their condition (efficacy of self care), their knowledge about the complaint and their need for information. The results showed that two of the additional factors (efficacy of self care and need for information) as well as most of the factors of the health belief model (efficacy of general practitioner care, perceived severity of complaint and cues to consult) were important determinants of consulting the general practitioner. The results suggest that patients sometimes expect information from their general practitioner rather than medical treatment. Furthermore, as the perceived efficacy of general practitioner care is also an important determinant, unnecessary consultation or unnecessary delay in treatment could be prevented by offering patients information about the potential effectiveness of medical care or self care for specific conditions. Implications for general practitioners' daily practice and future research are discussed.

Keywords: consultation reason; patient health beliefs; attitude to health; illness behaviour; health belief model.

# Introduction

ENERAL practitioners often ask themselves what makes I their patients decide to use their medical services. Research into the consulting behaviour of patients has been focused primarily on medical services in general.<sup>14</sup> The question of why patients consult their general practitioner is of particular importance because in many countries, such as the United Kingdom or the Netherlands, the general practitioner is the gatekeeper of the medical system.

The reason for investigating why patients use medical services often seems to be to prevent unnecessary consultations or delay in treatment. On the one hand, unnecessary consultations lead

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to medicalization of the patient's condition, extra costs for the medical system and waste of general practitioners' time. On the other hand, unnecessary delay for a patient with a serious complaint, could prolong the course of the disease, or necessitate more complex treatment.

There is little research which specifically addresses the question of why people do or do not consult their general practitioner. A comparison of consulters and non-consulters by Lydeard and Jones emphasized the importance of looking beyond the presentation of symptoms to patients' fears about the significance of their symptoms and to non-medical determinants of consultation behaviour.<sup>5</sup> The aim of the study reported here was to determine why people decide to consult their general practitioner with one complaint but not with another.

#### Method

# Health belief model

The theoretical basis for this study was the health belief model. originally formulated to explain (preventive) health behaviour, such as breast self examination or attending a screening programme.<sup>6</sup> The model assumes that subjective health considerations determine whether people perform a health related action, such as consulting their general practitioner. For example, the health belief model considers the perceived, rather than the real, severity of the complaint to be the propelling force behind the action.

According to the health belief model, the decision to consult the general practitioner can be explained by three factors: the extent to which a person perceives a threat to his or her health, the degree to which a person believes that a consultation with the general practitioner will be effective in reducing that threat, and 'cues to action' which prompt a person to consult the general practitioner. Cues to consult the general practitioner might be internal, that is symptoms, or external, that is mass media communications or interpersonal interactions.

The perception of a threat is itself influenced by general health values, specific beliefs about the seriousness of the complaint and vulnerability to a serious disease. Apart from the perceived efficacy of a consultation with the general practitioner, both the benefits of and the barriers to such a consultation are taken into account. The more benefits, and the fewer barriers people perceive, the greater the possibility that they will consult the general practitioner.

Although other approaches have been used<sup>7-11</sup> the health belief model is the most widely applied approach to the explanation of medically based preventive actions and underlies several studies of the utilization of medical services. 12-19 However, in order to investigate the determinants of consulting the general practitioner, we have added factors to the model, and made others more specific.

First, it was considered that, apart from the perceived effectiveness of professional medical care, the perceptions patients have of their own abilities to cope with the complaint would influence the decision to consult the general practitioner. 20-22 Even if patients accord a high rating to the general practitioner's ability to help, they may decide not to use professional care if they accord a similar high rating to their own effectiveness in coping with the condition.

Secondly, it is plausible that people consult the general practitioner because they need information rather than treatment. This need may play an important part in the decision to consult, as the general practitioner is often perceived by patients as an all-round doctor who can therefore provide information on all types of conditions.

Thirdly, it was decided to measure some variables more specifically than usual, because it is often suggested that the more specifically a certain concept is measured, the more predictive it is of a specific behaviour.<sup>23</sup> Patients were therefore asked not about their general susceptibility to disease, but about the perceived chance that the presenting complaint was indicative of a severe illness. Furthermore, patients were asked directly if they were concerned about their health in general instead of measuring the perceived threat indirectly by perceived susceptibility to and severity of the complaint.

Finally, the social aspects of the 'cues to action' were taken into consideration. Although the health belief model does not focus on social cues specifically, Ajzen and Fishbein<sup>23</sup> stress social influences as an important independent factor.

# Sample

In the period mid-November to mid-December 1988 a questionnaire was given to patients in the waiting rooms of eight urban general practices in the province of Limburg in the Netherlands. The only inclusion criterion used was that patients had come to consult the general practitioner of their own free will. Therefore, patients who came for a medical check up or at the invitation of the general practitioner for a follow-up consultation were excluded from the study. Children who could explain why they were waiting for the general practitioner and could answer the questions were included. No restrictions were made as far as the complaints of the patients were concerned — patients with chronic, new and intermittent complaints were included. Questionnaires were handed out until a total of 1000 had been completed.

# Questionnaires

Patients were asked to state the single most important or main complaint in a first questionnaire. After the consultation the respondents received a second questionnaire, which could be filled in at home and posted back to the department of health education.

Both questionnaires had been pretested and included items on the possible reasons for consulting the general practitioner and presenting the complaint. In the first questionnaire the patients were asked about aspects of the main complaint, their health beliefs, cues to consulting the general practitioner and their emotional state (Appendix 1). After the consultation the second questionnaire asked the patients to mention a second complaint which they had, but about which they did not or would not consult the general practitioner. For this complaint the questions in Appendix 1 were repeated.

In order to reduce the time and effort needed to answer the first questionnaire in the waiting room, all questions that could be asked after the consultation were put in the second questionnaire. Therefore background characteristics were covered in the second questionnaire using closed questions. These included: consultation variables — length of time with same general practitioner, number of consultations per year and length of time since last consultation; psychosocial variables — health status (Do you feel healthy compared with other people of the same age?) and usual action when ill; demographic variables — sex, age, marital status, education, occupation, health insurance and income. The second questionnaire also asked about barriers to

consulting in terms of time, transport and cost. Finally, open questions gave the respondents the chance to mention other determinants, cues to consulting the general practitioner or reasons for being worried.

## Statistical analysis

In order to explain the decision to consult the general practitioner, the scores for health beliefs, cues to consult and emotional state for the main complaint were compared with those for the second complaint. First, the background characteristics of those who did not mention a second complaint were compared. Further statistical analysis was focused on those who completed both questionnaires and who reported a complaint which they did not present. Secondly, multiple logistic regression analysis was used to examine the contribution of selected determinants to the prediction of the decision to consult the general practitioner.<sup>24</sup>

The selected determinants were variables which were assessed using a three point scale. In the logistic model the 'do not know' and 'not applicable' conditions were omitted and the extremes compared. Fitting the logistic regression model was carried out in three stages: including only the determinants from the health belief model; adding the perception of efficacy of self care, knowledge about the complaint and need for information to the health belief model; and adding characteristics of the complaint: frequency, duration, previous care and awareness of cause.

#### Results

Of the 1000 patients completing the first questionnaire 791 (79.1%) also returned the second questionnaire. Of these 791 patients 450 mentioned a second complaint. Some patients failed to answer all the questions.

Possible sample bias resulting from patients who did not return the second questionnaire was evaluated by two-sided univariate comparisons between selected characteristics of the 791 respondents and 209 non-respondents. This analysis revealed no significant differences between respondents and non-respondents in terms of the characteristics of the complaint presented to the general practitioner, health beliefs, cues to consult and emotional state. It can therefore be concluded that selective non-response is unlikely to be a source of bias in generalizing the results of further analyses.

The background characteristics of the 341 patients who mentioned only the complaint presented to the general practitioner and the 450 patients selected for further analysis, who also mentioned a second complaint which they did not present to the general practitioner were compared. Significant differences were found for the following variables: usual action when ill, sex, age, marital status and education. Patients who mentioned only one complaint rarely waited to see if the complaint improved spontaneously but preferred to consult the general practitioner. These respondents were also more likely to be male, older, married and less highly educated.

# Background characteristics of analysis sample

Most of the 450 respondents who mentioned a second complaint had had the same general practitioner for more than five years (64.4%), and had consulted the doctor between one and five times during the last year (69.5%), their last consultation being less than three months previously (71.8%). Of the respondents 41.8% stated that they felt healthy compared with others of the same age and 75.6% that they normally treated their complaints without consulting a general practitioner. The majority of the patients were female (64.0%), less than 45 years of age (72.4%) and married (57.6%). Of the respondents 49.3% had completed

secondary education, 44.7% had a paid job and 39.9% a net income of 1500-2500 guilders (£500-£850) per month. Most of the 450 patients were insured with a public health insurance fund (71.4%).

## Decision to consult

Multiple logistic regression analysis was used to provide information about the contribution of selected determinants to the prediction of the decision to consult the general practitioner about a complaint (Table 1). Determinants with odds ratios less than 1.00 decrease the likelihood of consulting the general practitioner, whereas determinants with odds ratios greater than 1.00 increase the likelihood.

Considering model 1—the basic elements of the health belief model—the perceived influence of advice to consult the general practitioner, efficacy of general practitioner care and severity of the complaint were significantly and positively associated with the decision to consult the general practitioner, suggesting a determining effect (Table 1). Information received from the media also seemed to increase the likelihood of the patient consulting the general practitioner. The overall model based on the elements of the health belief model showed a high predictive value for consulting the general practitioner (98.9%).

Efficacy of self care, knowledge about the complaint and need for information were added in model 2. Perceived efficacy of self care decreased the likelihood of consulting the general practitioner while perceived need for information was positively associated with presenting a complaint (Table 1).

Finally, three characteristics of the complaint — frequency, duration, and awareness of cause — were added to model 2. These variables did not change the results obtained from model

Table 1. Significant factors from the multiple logistic regression model of the decision to consult the general practitioner for the sample of 450 patients.

Variable	Model 1ª		Model 2 <sup>b</sup>	
	Logistic regression coefficient (SE)	Odds ratio	Logistic regression coefficient (SE)	Odds ratio <sup>c</sup>
Intercept <sup>d</sup>	0.005 (0.095)	<del>-</del>	0.005 (0.095)	_
Cues to consult				
Influence of advice	1.138 (0.400)	3.12***	1.136 (0.522)	3.12***
Influence of mass media	0.166 (0.648)	1.18***	-0.029 (0.764)	0.97* (1.03)
Health beliefs				
Severity of complaint	1.286 (0.228)	3.62***	0.868 (0.242)	2.38***
Efficacy of GP care	1.153 (0.169)	3.17***	1.383 (0.213)	3.99***
Efficacy of self care	<del>-</del>	. <del>-</del>	- 1.717 (0.347)	0.18*** (5.56)
Need for information	<del>_</del> '	_	1.062 (0.214)	2.89***

<sup>&</sup>lt;sup>a</sup> Health belief model elements. <sup>b</sup> Health belief model with addition of efficacy of self care and need for information. <sup>c</sup> The inverse of an odds ratio less than 1.00 is given in parentheses to facilitate comparison of the size of the variable's effect with that of a variable with an odds ratio greater than 1.00. <sup>d</sup> Baseline value. SE = standard error. \*P<0.05; \*\*\*P<0.001 testing the null hypothesis that all parameters are zero.</p>

2. Advice from others to consult the general practitioner, perceptions of the efficacy of general practitioner care and self care, and need for information remained the important determinants of consulting the general practitioner.

## **Discussion**

This study focused on patients, interviewed in general practice waiting rooms, who stated after the consultation that they had a second complaint which they did not present to the general practitioner.

The results of logistic regression analysis using components of the health belief model give valuable information on important determinants of consulting the general practitioner. Heeding the advice of others to consult the general practitioner was an important determinant. When patients perceived general practitioner care as very effective and/or the complaint as very serious, they were also more likely to decide to consult the general practitioner. These results are similar to those of Berkanovic and colleagues. The results of this study suggest that the influence of others, a neglected element of the health belief model, is worth further investigation. A noteworthy finding of this study was that worry about health in general and belief that the presenting complaint was indicative of a serious illness were not important variables in the decision to consult the general practitioner.

We were especially interested in whether perceptions of efficacy of self care and need for information would be useful additions to the health belief model when the model is used to explain the decision to consult the general practitioner. 21,25-28 The results show that when patients felt that the complaint could be treated without the help of the general practitioner, they were less inclined to consult. The need for information seemed to be an important reason for patients to present a complaint to the general practitioner. Thus, efficacy of self care and need for information should be added to the health belief model. However, the findings indicate that characteristics of the complaint — frequency, duration and awareness of cause — do not explain an additional portion of variance.

The way people perceive their complaint may differ considerably from the way the complaint should be viewed objectively.<sup>29</sup> The manner in which complaints are interpreted by patients has received relatively little research attention although Jones and colleagues have studied the significance attached to a set of symptoms.<sup>30</sup> Three factors of perceived significance emerged: the first was defined by the extent to which symptoms were perceived as threatening, disruptive and painful; the second consisted of the familiarity of symptoms and the perceived personal responsibility for their occurrence; the third reflected how embarrassing the symptoms were.

The study reported here has several aspects that may limit the generalizability of the results. The population comprised only patients consulting the general practitioner. It may be that people who rarely consult the general practitioner have different beliefs, for example, a lack of confidence in medical care. Their emotional state could also differ considerably: their anxiety might prevent them consulting the general practitioner. The study was also limited in its ability to determine the effects of barriers to consulting the general practitioner on the decision to consult: patients who did not consult because of perceived barriers could not, by definition, be subjects in the research. For the same reason the study could not determine whether patients with certain background characteristics were more inclined to consult the general practitioner than patients with a different background. In addition, the study population consisted only of those people who had a second complaint they did not present. Analysis revealed that patients with only one complaint

differed mainly with respect to sociodemographic variables from the patients with two complaints.

The study was limited by depending on self reports from patients. No complementary information from the general practitioner was obtained, which could contribute to ensuring a correct interpretation of patients' health beliefs or consultation behaviour.

These results have several implications for future research and the daily practice of the general practitioner. First, it became clear that information played an important part in explaining the decision whether or not to consult. General practitioners should realize that patients may consult to obtain more information, rather than medical treatment. More information about the potential effectiveness of different types of care could offer patients the possibility to choose the most appropriate care. Secondly, this study focused on complaint characteristics, such as frequency or duration of the complaint, as determinants of consulting the general practitioner. Future research could focus on specific complaints, such as low back pain or headache, as determinants of consulting the general practitioner. Furthermore, interventions could be developed where patients are informed about the effectiveness of medical care or self care for specific conditions. Such interventions might prevent unnecessary consultation or treatment delay, resulting in lower costs, less likelihood of the course of the disease being prolonged or more complex treatment necessitated and less waste of general practitioners' time.

## Appendix 1. Questions in first patient questionnaire.

#### Characteristics of complaint

Have you had this complaint before?a For how long has this complaint been bothering you?b Have you tried something to treat this complaint?c Are you aware of the cause of this complaint?d

## Health beliefs

Do you think your complaint is serious?e

Do you think your complaint has to do with a serious disease?f

Do you think the GP can treat your complaint?f

Do you think that you could have treated your complaint yourself?f

Do you think you know enough about your complaint?8

Do you need more information about your complaint?f

#### Cues to consult

Did people advise you to consult the GP?h Did this advice influence your decision?i

Do you know someone with the same complaint?h

Did the decision of this person, to consult his or her GP, influence your

Did the result of the treatment of this person influence your decision?

Did you receive information from the media about your complaint?h Did this information influence your decision?i

## Emotional state

Do you feel worried about your health at this moment?<sup>j</sup>

- a 3-point scale from 0 = never to 2 = several times.
- <sup>b</sup> 5-point scale from 1 = <1 week to 5 = >1 year.
- c 3-point scale: 1 = no care, 2 = self care, 3 = medical care.
- d 3-point scale from 1 = (totally) unaware to 3 = (very) well aware.
- e 3-point scale from 1 = not serious (at all) to 3 = (very) serious.
- f 3-point scale from 1 = (certainly) not to 3 (most) certainly.
- g 3-point scale from 1 = (far too) little to 3 = (more than) enough.
- <sup>h</sup> 2-point scale from 0 = no to 1 = yes.
- i 3-point scale from 1 = (very) little to 3 = (very) much.
- j 3-point scale from 1 = not worried (at all) to 3 = (very) worried.

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