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RESEARCH

Primary health-care patients' reasons for complaint-related worry and relief

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Aim: Primary care patients are commonly worried about their complaints when consulting their doctor. Knowing the reasons behind patients' worries would enhance consultation practices. The aim of this study was to find out the reasons patients themselves give for their worries before a consultation and for possible relief or persistent worry after the consultation. **Background:** Our previous study using quantitative methods suggested that worried patients were uncertain about what was wrong with them and they perceived their complaints as serious. These results left some aspects unanswered; for instance, why did the patients consider their complaints severe. **Methods:** We conducted semi-structured interviews of patients, aged 18–39 years, with somatic complaints other than a common cold ($n = 40$), both before and after a consultation, and the patients described their reasons for worry in their own words. These qualitative data were analysed using thematic content analysis. **Findings:** The patients gave as reasons for their worries uncertainty, consequences of their complaints (eg, inability to work), insufficient control (eg, inadequate treatment) and prognosis. The patients were relieved when their uncertainty was diminished by getting an explanation for their complaint or when they achieved more control by getting treatment for their complaint. After a consultation, their reasons for worry, except for concern about the ability to function, tended to be replaced by other reasons. Psychological consequences and mistrust in health care also played a role in persistent worry. Our findings offer support to the patient-centred clinical method in primary care. To address the patients' worries properly, the GP should bring them up for discussion. Special attention should be given to worries about the ability to function, as they tend to persist even after a consultation.

Key words: primary health-care patients; reasons for worry; worry

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Introduction

Primary health-care patients waiting to meet their doctor are commonly worried about their complaints, even though they may not be serious in the opinion of a medical professional (Jackson *et al*., 1999; Laakso *et al*., 2005). In our previous study, we found that some patients were relieved, whereas others remained worried after a consultation (Laakso *et al*., 2008). It turned out that persistently worried patients perceived their complaints as more serious than others did after a consultation. Yet, according to the attending GPs, their complaints were not medically more serious than the complaints of the relieved patients. The persistently worried patients were also uncertain about what was wrong with them. In the light of these findings it is understandable that worried patients generally prefer a patient-centred approach, which includes good communication and exploration

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of their concerns (Little *et al*., 2001). Bringing patients' worries up for discussion may be difficult for doctors, though, because patients often leave their concerns unexpressed during a consultation (Barry *et al*., 2000; Floyd *et al*., 2005). So, knowing more about the contents and prevalence of patients' worries would be useful in enhancing consultation practices. Earlier studies on patients' worries in primary health care have mainly focused on their general tendency to worry about their health (Robbins and Kirmayer, 1996; Fink *et al*., 1999) and on worries related to specific illnesses, for example diabetes or whiplash (Delahanty *et al*., 2007; Russell and Nicol, 2009), whereas little is known about the various reasons patients may have for their worries and about possible changes in them after a consultation.

Patients normally try to develop their own understanding of their complaints. They appraise their symptoms and compare them with their previous experiences and knowledge. According to the self-regulation model (Leventhal *et al*., 1998), patients' perceptions of illness are comprised of five dimensions. These are the illness identity (symptoms and illness label, ie, the name of the illness, eg, 'migraine'), the cause of the illness (eg, hereditary, bacteria), the timeline (acute versus chronic illness), the consequences of the illness (eg, social, economic) and perceived control over the illness. These perceptions are associated with emotional reactions such as worry. According to the cognitive-behavioural hypothesis of health anxiety, a patient's reactions to a health threat depend on the perceived probability of the threat and the perceived cost or awfulness of the danger. In some studies, structured questionnaires with preset response alternatives (yes/no or Likert scale) have been used to find out whether primary care patients' worries result from perceiving their current complaints as a sign of a serious illness (Brody and Miller, 1986; Marple *et al*., 1997). However, patients may also be worried about many other things, depending on the perceived probability of the threat and the perceived cost or awfulness of the danger. For example, worry about losing autonomy or inability to work has been reported (Brorsson and Råstam, 1993; Lang *et al*., 2002).

Perceptions of a health threat can, however, be modified by a perceived ability to cope with the threat and a perception of the rescue factors available, such as medical treatment (Salkovskis and Warwick, 2001). In other words, a medical consultation has the potential to affect the patient's perception of the illness. This effect may vary considerably depending on, among other things, how established the patient's pre-existing view is. Patients' own views of their condition, but also their medical knowledge and emotional state, may to a great extent filter what kind of information they are inclined to pick up from their GP's messages and how they understand and recall them. And in turn, this understanding may affect the patient's perception of the illness and consequential anxiety or worry (Ley, 1979; Kessels, 2003).

In the present study, we explored how primary health-care patients describe in their own words their reasons for worry behind their current complaint both before and after a consultation, as well as their reasons for possible relief after the consultation. Our purpose was also to explore processes of relief or persistent worry, for example, would the reasons for worry change during the consultation, and would specific reasons for relief be associated with specific reasons for pre-consultation worry?

Method

Health-care setting, participants and procedure

The study was carried out in a public primary health-care centre with a family doctor system, serving the 38 000 inhabitants of a town and its rural surroundings in Southern Finland. The present study is part of a longitudinal research project aimed at exploring the development of complaint-related worrying in young adult primary health-care patients (Laakso *et al*., 2005). As we aimed to explore various reasons that primary care patients may have for their complaint-related worry, all the patients aged between 18 and 39 years who made an appointment for a current somatic complaint other than a common cold were included in the sample. Patients with psychiatric complaints or who had non-complaint-related reasons for making an appointment, for example wellness examinations or a follow-up for chronic medical disorders, were excluded. With these inclusion criteria we also strove to reach cases in which the origin of the complaint would not be obvious to the

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patient and the complaint would not be associated with chronic illnesses and confirmed diagnoses. In other words, in these cases there would presumably be more room for patients' own appraisals of their complaints and more potential for changes in worry during the consultation.

Receptionists recruited consecutive patients who met these inclusion criteria. In these cases the consultation in the health-care centre usually took 10–30 min. After informed consent, the first author interviewed the patients immediately before and after the consultation. The ethical committee of the regional hospital district approved the study protocol.

The patients were distributed among the 16 doctors working in the health-care centre. The doctors were informed in general about the ongoing study, but they were not aware of its specific objectives. Neither were they told which of their patients belonged to the sample. Only after all the interview protocols were completed, the GPs were asked to appraise the medical severity of their patients' complaints.

Pre- and post-consultation interviews

In a semi-structured interview before the consultation, the patients were asked to *rate the intensity of their worry* over their current complaint on a visual analogue scale (VAS, 0–100, 0 = not at all worried, 100 = extremely worried). Then they were asked to give *reasons for their worry* in their own words. In a post-consultation interview the patients were asked to rate their worry again on the same VAS and to give reasons for their rating. Additionally, the patients were asked whether they felt more, less or equally worried over their complaint compared with their worry before the consultation ('*comparison question on worry*') and, again, to give reasons for this in their own words. By using these two different but concurrent measures, we aimed to confirm the validity of measuring the change in worry. The same open questions were presented to all the patients, and as the questions were explicitly focused, the researcher could easily write down the patients' answers word by word.

Patient and complaint characteristics

Altogether 62 patients were interviewed. Forty-five (42%) of the 107 eligible patients were not able to participate. The main reason for refusal (32 patients, 71% of the refusers) was problems in making arrangements for participation on a very short notice (eg, absence from work, transportation to the health-care centre). The refusers did not differ significantly from the participants in terms of sex or age.

Only worried patients ($n = 40$), that is, patients with *significant pre-consultation worry* (VAS > 50), were included in the analyses of the reasons for worry and relief. The cutting point for significant worry was the same as the one we used in our earlier quantitative study on the background factors of and changes in complaint-related worry (Laakso *et al.*, 2008). We noticed that patients who scored below 50 points on a VAS scale reported lower scores in illness worry (Illness Worry Scale, developed and validated by Robbins *et al.*, 1990; Kirmayer and Robbins, 1991; Robbins and Kirmayer 1996) and anxiety (Symptom Check-List-90 – SCL-90), for example, and they appraised their complaints as less severe. These findings support the use of this cut-off point to identify the group of significantly worried patients.

There were more women (63%) than men in the sample of worried patients. The most common complaint was musculoskeletal symptoms (38% of the patients), followed by abdominal symptoms (23%), headache (15%), dermatological problems (8%), cardio-pulmonary symptoms (8%) and miscellaneous symptoms (10%). A majority of the patients (70%, ie, 28 patients) had suffered from their complaint for three months or less, nine patients had a complaint with duration of several months and three patients had a complaint that had lasted five to ten years.

According to the GPs' appraisals, most of the complaints were self-limiting (30%) or curable (38%). Some were considered chronic (23%) and only 10% required treatment (life or functioning threatened if *not* treated). None of the complaints were appraised as severe (life or functioning seriously threatened *even if* treated). Thus, the sample consisted of young adults with non-serious complaints that are typical symptoms for primary care patients, as intended.

Study design and content analyses

Patients' answers were analysed using thematic content analysis (Green and Thorogood, 2009). The inductive strategy of analysis was chosen

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because we strove to highlight patients' reasons for their worry as they described it themselves. The categories were derived from the empirical data instead of using theories as a starting point for identifying them. After this, theories such as the self-regulation model (Leventhal *et al*., 1998) and cognitive-behavioural model of health anxiety (Salkovskis and Warwick, 2001) served as a basis to understand, interpret and conceptualise the meanings of reasons for worry for patients.

As the meaning unit we used combinations of words and sentences related to each other in content, that is, each meaning unit expressed one reason for worry (Graneheim and Lundman, 2004). Because the patients could give several reasons for their worry and some of them gave reasons for both relief and persistent worry in the post-consultation interview, the patients' answers often consisted of several meaning units. Consequently, a patient's answer might be given several category codes. The meaning units were classified into categories, which were exhaustive and mutually exclusive. Some patients talked about peripheral matters or their reasons for worry remained unclear. These answers were classified as *no reasons for worry given*.

To begin with, the first author (V.L.) read through all the answers, identified the themes that emerged in them, and compiled preliminary descriptions and definitions for each thematic content category. Second, both authors coded the answers independently according to these preliminary category descriptions. Examination of observed incongruities showed that some of the limits of the meaning units and the criteria of the categories needed further clarification. After these clarifications and consequent recording, the final categorisations of the remaining incongruities could be obtained by negotiations (Graneheim and Lundman, 2004; Joffe and Yardley, 2004). The analyses of pre- and post-consultation data resulted in the same categories of reasons for worry. One additional category of worry emerged in the post-consultation data, namely 'complaint still present'. The categories of reasons for relief were identified, naturally, solely on post-consultation interviews.

We also transformed qualitative data into quantitative form by calculating the distribution of the reasons, that is, their frequencies and the percentage of patients who mentioned a reason. In this way we found the most common reasons, as this is important information from the point of view of the consultation praxis. This data transformation design is one of the recommended models of mixed methods studies in primary care (Creswell *et al*., 2004).

Finally, we took a closer look at the patients who *consistently* reported either relief or persistence of worry. These patients were identified on the basis of three methods: (1) the VAS ratings of pre- and post-consultation worry (*relieved* patients = decrease in worry of at least 40 points and *persistently worried* patients = increase in worry or decrease of <40 points), (2) the answers to the comparison question on worry and (3) the reporting of reasons for relief or worry after the consultation. There was significant but not perfect overlap between the groupings of patients made on the basis of changes in the VAS scores and based on the answers to the comparison question (χ^2 16.19 (4), $P = 0.003$).

Thus, the '*relief group*' ($n = 11$) consisted of those who were classified as relieved according to their VAS ratings, reported being 'less worried' to the comparison question and gave reasons for relief after the consultation. The '*group of persistent worry*' consisted of patients ($n = 14$) who were classified as persistently worried according to their VAS ratings, answered 'equally worried' or 'more worried' to the comparison question and still reported reasons for worry after the consultation.

Results

Reasoning behind pre- and post-consultation worry

The analysis of the reasons for the patients' worry generated 11 categories (Table 1). In the first category, *nature of the complaint*, the patients based their worry on the characteristics of the complaints, for example the duration or intensity of the complaint. Also, suffering *pain* as such was experienced as worrisome, as was the fact that the complaint was still present after the consultation (*complaint still present*). In each of these three categories, worry seemed to be based on the patient's perception of a disturbing bodily sensation as a health threat. In other words, the patients had assumptions of 'normal' and threatening signs. For example, a stable course and long duration of the

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Table 1 Categories of reasons for pre- and post-consultation worry, definitions of categories and examples of meaning units

Category	Definition of the category	Examples of meaning units
Nature of the complaint	Something about the nature of the complaint so far (eg, its duration, intensity or quality) worries the patient.	'The complaint has not gotten better… it has lasted so long… it has become more intense/harder'. 'It has become worse all the time'.
Pain	The patient feels pain that is intense or otherwise disturbing.	'It's hard to have this, it hurts'. 'Because of the pain… the pain is worse than a toothache'.
Complaint still present	The patient is still worried after the consultation, as the complaint is still present and unchanged; the consultation did not immediately change the situation.	'Now I know, but it doesn't change anything, because the pain is still exactly the same'. 'As it didn't become better during this consultation yet'.
(Having/getting) No explanation	The patient does not know what's wrong with him/her and this makes him/her worry.	'As I don't know, what's wrong'. 'Uncertainty about what's wrong with me, what causes the pain'. 'I'm even more uncertain, will they ever find the cause of it'. 'As nothing was cleared up, the situation is the same as before the consultation'.
Bodily damage or dysfunction	The patient is worried that the complaint is related to some damage or dysfunction in the body.	'If I let it go on and on, I'm afraid my body will suffer from it'. 'If the inflammation leads to inability to conceive children'.
Ability to function	The complaint impairs the patient's ability to manage his/her daily activities, to act in different roles, etc.	'When the terrible headache attack comes, I am not able to drive the car, I just shut my eyes and throw up, I can't do any housework'. 'I'm pretty worried, as I can't do almost anything'.
Psychological consequences	The complaint impairs cognitive performance (eg, concentration) or evokes negative emotions (eg, nervousness or depression).	'I keep thinking about it daily nowadays, it disturbs me daily in some way'. 'It (the complaint) easily makes you depressed and your mood keeps varying'.
Death	The patient is worried about the complaint leading to death.	'If it is a heart problem…you cannot survive without your heart'.
Inadequate treatment	The patient has not gotten treatment for the complaint or he/she assumes that the complaint is not easily treatable.	'I came to get some help and now there is no help to get'. 'There have been many attempts to treat it and they have not been helpful'. 'Time is running out and the sports game will soon take place and the doctor has not made any progress with my complaint'.
Mistrust in health care	The patient reports mistrust in doctors or health care or doubts the quality of care.	'If I have to go to hospital for a long time, I don't like it, because you can get a hospital bacteria there, if I'll be treated by some moron doctor who makes treatment errors again'. 'Because I don't trust the doctor'.
Negative prognosis of the complaint	The patient is worried about what will happen with the complaint *in the future*, will the complaint get better, will it turn out to be serious, etc.	'I'm worried it is something serious'. 'It (*the pain*) may become so bad I can't bear it a moment longer'. 'I can't be completely sure that it will get better; that is why I'm worried'.

Table 2 Distributions of the reasons for pre- and post-consultation worry and the percentage of the patients who mentioned the reason

Category of reason	*Pre*-consultation interview ($n = 40$)		*Post*-consultation interview ($n = 29$)	
	Mentions of reasons (f)	Patients who mentioned the reason (%)	Mentions of reasons (f)	Patients who mentioned the reason (%)
Nature of the complaint	11	28	1	3
Pain, discomfort	3	8	1	3
Complaint still present	–	–	4	14
No explanation	9	23	10	35
Bodily damage/dysfunction	9	23	2	7
Ability to function	12	30	9	31
Psychological consequences	7	18	4	14
Death	2	5	1	3
Inadequate treatment	3	8	3	10
Mistrust in health care	1	3	4	14
Negative prognosis of the complaint	6	15	6	21
No reasons for worry given	2	5	3	10

complaint may be viewed as more serious signs of illness than are transient and short-term symptoms. In addition, the patients were concerned about not knowing what was wrong with them. This uncertainty appeared in the category '*no explanation*' as a reason for worry, that is, patients were uncertain about the identity of their illness.

The patients were also concerned about the possibility that the complaint could cause some kind of *bodily damage or dysfunction* or could impair their *ability to function*, that is, their ability to work or cope with their parenting. The complaint could also have worrisome *psychological consequences*, which refer, for example, to negative emotions and thoughts elicited by the complaint. Some patients worried about *death*. For a few patients, their pre-consultation worries were based on their experiences of *inadequate treatment* for their complaints. Some patients reported *mistrust in* doctors or the *health-care system*. Finally, some patients reported concern over *the prognosis of the complaint*, for example whether their complaints would be cured and whether they would seriously affect their lives. Thus, the anticipated negative consequences and perceived treatment options were closely linked to the patients' worries. Feelings of worry were strengthened when the complaint was perceived as a sign of an awful threat to health and life, and when no proper rescue, such as treatment, seemed to be available (Leventhal *et al*., 1998; Salkovskis and Warwick, 2001).

The distribution of the expressed reasons revealed that the patients were most often concerned about their ability to function or the lack of an explanation for their complaint (Table 2). Many patients were also concerned about the nature of their complaint, its possible damaging or harmful effects on body functions and prognosis. Interestingly, patients expressed worry because of a lack of an explanation after the consultation more often than before it. Mistrust in health care as reason for worry was also reported after the consultation more often than before it (Table 2).

Reasoning behind post-consultation relief

The reasons for relief after the consultation resulted in five content categories (Table 3). The patients were relieved when they *got an explanation* for their complaint or when they were referred for further *examinations* in order to get one. Furthermore, the patients reported relief because of getting *treatment* or having *trust in health care*, that is, they believed they were in good hands. Finally, the patients felt relieved because they believed in the *positive prognosis of the complaint*, that is, the complaint would be alleviated or it would not affect their life badly. To conclude, as described in the cognitive-behavioural model of health anxiety, diminished awfulness (getting a probably reassuring explanation) and strengthened trust in rescue (getting treatment and trust in health care) led to

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Table 3 Categories of the reasons for the patients' ($n = 25$) post-consultation relief, definitions of the categories and examples of meaning units – distributions of the reasons and the percentage of the patients who mentioned the reason

Category	Definition of the category	Examples of meaning units	*f*	%
Getting an explanation	The patient got an explanation for his/her complaint.	'I got an answer to what's wrong'. 'Because it was cleared up; the doctor explained it thoroughly and listed alternatives'.	13	52
Getting examinations	The patient got a referral to medical examinations.	'Now the tests have been taken…then it will be cleared up, if there's something wrong or not'. 'I'm going to medical examinations with confident thoughts'.	5	20
Getting treatment	The patient got treatment for his/her complaint.	'I got physiotherapy for my neck'. 'I got medicine, there is a cure, I'm not so worried anymore'.	11	44
Trust in health care	The patient expressed trust in health care, he/she felt confident.	'Now I've got the doctor's opinion and I trust in it'. 'I trust in medicine'.	4	16
Positive prognosis of the complaint	The patient reported confidence that he/she will be able to deal with his/her complaint.	'I was told that it will get better on its own'. 'I'm confident that it will begin to get better (with the medicine I got)'. 'Because nothing serious was found, I'm not very worried'.	13	52

mitigated worry and relief (Salkovskis and Warwick, 2001).

Altogether, getting an explanation and/or treatment or having a positive and trusting view of the prognosis of the complaint were most often found to be the reasons behind experiences of relief (Table 3).

Processes of relief and persisting worry

We explored the processes of relief and persistent worry in two groups of patients who consistently reported either relief or persisting worry, that is, the *relief group* (Table 4), and the *group of persistent worry* (Table 5). These processes linked the reasons for pre-consultation worry with the reasons for post-consultation worry or relief.

Pre-consultation worry based on the perceived *nature of the complaint* or having *no explanation* for the complaint was relieved by getting an explanation and, in many of these cases, also getting treatment. These two reasons for worry indicate a patient's uncertainty about the identity of the illness, and they were diminished by getting an explanation from the GP. Case example S47 below demonstrates these two reasons for worry and how they were relieved by getting an explanation, accompanied by treatment:

> Pre: It has lasted for a long time and it bothers me all the time and I don't know what it is.
> Post: I got an answer to what's wrong, I got treatment advice and now I know how to take proper measures for it.
> (S47, back pain)

Notably, all the patients who reported pre-consultation worries because of a lack of an explanation were relieved by getting an explanation. A further example of a 'worry and uncertainty relieved by the GP's explanation' process was pre-consultation worry about *bodily damage* that was relieved by getting an explanation or examinations:

> Pre: If the inflammation leads to not being able to have children.
> Post: Now that the tests have been taken, then it will be cleared up, whether there is something wrong or not.
> (S2, pain in the lower abdomen)

Worry about *bodily damage* and the *nature of the complaint* was also relieved by getting treatment.

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Table 4 Processes of relief – pre- and post-consultation answers of the patients in the *relief group* ($n = 11$)

Patient ID	Reasons for pre-consultation worry	VAS score of the pre-consultation worry	VAS score of the post-consultation worry	Reasons for post-consultation relief (if the patient also expressed reasons for worry, these are shown in parentheses)
S7	Nature of the complaint	92	42	Getting an explanation (+ getting no explanation)
S22	Nature of the complaint + no explanation	69	9	Getting an explanation + getting treatment
S47	Nature of the complaint + no explanation	71	7	Getting an explanation + getting treatment
S18	Nature of the complaint + bodily damage	61	4	Getting treatment
S29	Nature of the complaint + no explanation + bodily damage + negative prognosis of the complaint	60	4	Getting an explanation (+ psychological consequences)
S45	No explanation	79	20	Getting an explanation + getting treatment + positive prognosis of the complaint + getting examinations
S12	No explanation + ability to function + psychological consequences	100	19	Getting an explanation + getting treatment
S2	Bodily damage	85	45	Getting examinations
S15	Ability to function	94	49	Getting treatment + positive prognosis of the complaint
S48	Ability to function	100	0	Getting treatment + positive prognosis of the complaint
S33	Ability to function +negative prognosis of the complaint	91	50	Positive prognosis of the complaint (+ ability to function)

VAS = visual analogue scale.

In contrast, being left without treatment led to persistent worry (Table 5):

> Pre: The complaint is becoming worse all the time and I worry about what's going to happen next. Will my menstruation cease?
> Post: I came to get some help and now there was no help to get.
> (S55, menstrual disturbance)

Worry about *ability to function* was unique in the way that it tended to persist after the consultation, as in the case below. This case also demonstrates how worry about the ability to function was accompanied by negative expectations about the *prognosis of the complaint*:

> Pre: If I can't find a job that I could manage, and if it starts to affect my daily life, house-cleaning, etc.
> Post: My hand is just so weak that it gets strained because of work; if I'll always lose my job because of my hand. If it bothers me the rest of my life, if there's no way to treat it.
> (S13, hand ache)

Patients whose worry was solely based on *psychological consequences* of the complaint remained worried as they did not get an explanation for their complaint from the GP:

> Pre: I keep thinking about it every day nowadays, it disturbs me in some way every day.
> Post: I became uncertain, will they ever find the cause of the complaint. The doctor said it's common to have stomach complaints; I think he did not really take me seriously.
> (S36, stomach trouble)

The patient above (S36) also exemplifies *mistrust in health care*, as was the case with patients who were worried about *death*:

> Pre: I became scared because of the bad blood values, they are associated with staying alive…as I have dependants… it needs to be cleared up whether it is something serious.
> Post: I will be worried until I get the next blood test results…I'll be relieved if my hemoglobin has kept on rising… only then will I believe the doctor that it's anemia.
> (S16, tiredness)

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Table 5 Processes of persisting worry – pre- and post-consultation answers of the patients in the group of *persistent worry* ($n = 14$)

Patient ID	Reasons for pre-consultation worry	VAS score of the pre-consultation worry	VAS score of the post-consultation worry	Comparison question	Reasons for post-consultation worry
S55	Nature of the complaint + bodily damage + negative prognosis of the complaint	88	81	Equally	Ability to function + inadequate treatment
S9	Nature of the complaint + inadequate treatment	71	48	Equally	Psychological consequences + mistrust in health care
S19	Pain + psychological consequences	56	50	More	Bodily damage
S4	Ability to function	94	57	Equally	Ability to function + complaint still present
S10	Ability to function	100	100	Equally	Ability to function + complaint still present
S14	Ability to function	100	96	More	Ability to function + inadequate treatment
S13	Ability to function	81	63	Equally	Ability to function + inadequate treatment + negative prognosis of the complaint
S30	Ability to function	100	100	Equally	Complaint still present + pain + negative prognosis of the complaint
S59	Ability to function + mistrust in health care	65	89	Equally	No explanation + bodily damage + negative prognosis of the complaint
S39	Psychological consequences	70	70	More	No explanation + psychological consequences
S36	Psychological consequences	93	97	More	No explanation + mistrust in health care
S16	Death	86	86	Equally	No explanation + mistrust in health care
S3	Death	64	51	Equally	Mistrust in health care (+ getting an explanation)
S24	Inadequate treatment	78	77	Equally	No explanation

VAS = visual analogue scale.

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The eight patients who expressed 'no explanation' as a *new* reason for worry after the consultation (Table 2) had reported other reasons for their worry before the consultation, mostly pain, ability to function, psychological consequences and death. Five of them belonged to the group of persistent worry (Table 5). Also the four patients reporting mistrust in health care as a new reason after the consultation consistently reported persisting worry; before the consultation they had been worried about death, psychological consequences, the nature of the complaint and inadequate treatment (Table 5).

In conclusion, all the patients, whose pre-consultation worry was caused by uncertainty (lacking an explanation), were relieved by getting an explanation from the GP. In contrast, worry tended to persist in patients who expressed fear of death or disturbing thoughts or emotions (psychological consequences) instead of uncertainty before the consultation, but reported uncertainty and mistrust in health care after the consultation. Finally, patients who were worried about their ability to function tended to remain worried, and this was often associated with experiences of getting no treatment.

Discussion

To sum up our main findings, patients were worried before the consultation because of *uncertainty* (not knowing what is wrong and not understanding the nature of their symptoms), the *consequences* of the complaints (bodily damage, impaired ability to function, psychological consequences, death), insufficient *control* or rescue factors (inadequate treatment, mistrust in health care) and the *prognosis* of the complaint. As a whole, these same categories of reasons for worry also existed after the consultation, but in individual cases the reasons for pre-consultation worry tended to be replaced with other reasons after the consultation. In addition, some patients remained worried because the complaint was still present. Most often patients' worry was caused by uncertainty and concerns about their ability to function and vice versa; patients were most often relieved by getting an explanation or by getting treatment for their complaint, as well as by having confidence in a positive prognosis. Patients who were worried because of a lack of explanation for their complaint before the consultation were relieved by getting an explanation from the GP. On the contrary, worry about the ability to function tended to persist and could only be relieved by getting treatment. Patients who were worried about death or the psychological consequences of the complaint (such as nervousness, depressive mood, difficulty in concentrating) before the consultation tended to be worried even after the consultation. The persistence of their worry was associated with the experience of being left without an explanation and mistrust in health care.

Our previous study, which used quantitative methods, indicated that worry is perpetuated by uncertainty (Laakso *et al*., 2008). The results of the present study, which uses qualitative methods, support this finding and further illuminate the experience of uncertainty; it may be associated with concerns about bodily damage and psychological consequences of the complaint, such as nervousness or diminished ability to concentrate. We also found previously that worried patients appraised their complaints as severe. Our present findings with qualitative methods reveal further that, for the patient, 'seriousness' may mean 'impaired ability to function'. In all, our results suggest that this kind of worry may be very persistent.

Uncertainty regarding the nature of the complaint as one of the key experiences is not surprising. When faced with a complaint, a person often starts to search for a label and tries to figure out what is wrong (Martin *et al*., 2001). It is understandable that this naming process easily becomes active in primary care patients who may consult a GP for the first time and thus may not yet have an explanation for their complaint. Most of these uncertain patients were relieved by getting an explanation for their complaint. This finding is in line with a previous study (Woloshynowych *et al*., 1998) showing that primary care patients found talking about their symptoms with the doctor most helpful, as was having the GP explain what was wrong with them. Because the explanation is reassuring in most cases, the experience of a threat also diminishes, which is in line with the cognitive-behavioural hypothesis (Salkovskis and Warwick, 2001). Worry about the complaint causing bodily damage can also be considered an expression of uncertainty. This was relieved by getting an explanation, which presumably can result in a better understanding of the

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nature of the complaint, or by a referral to medical examinations, which could be seen as a way to find out what is wrong.

Several patients were worried after the consultation due to a lack of explanation for their complaint, even though they had not reported this concern before the consultation. Either this uncertainty was left unvoiced in the pre-consultation interview or perhaps their need for an explanation and subsequent relief originated from another reason for worry, such as the perceived consequences of their complaints. Some of these patients were worried about death or the psychological consequences of the complaint before the consultation; patients with these reasons for worry tended to be worried also after the consultation. Reporting psychological consequences of the complaint can be taken as an expression of a strong emotional load associated with the current complaint. Constant rumination about what is wrong along with impaired mood and cognitive functioning may provide room for negative appraisals of the complaint and, consequently, experiences of increased health threat. This vicious circle tends to preserve patients' worry, which is consistent with the cognitive-behavioural hypothesis of health anxiety (Salkovskis and Warwick, 2001). If this is the case, the strongest experiences of health threat and consequently expectations of rescue by health personnel may emerge in these patients.

Uncertain patients often prefer to visit a familiar doctor, that is, they value continuity in health care (Turner *et al*., 2007), which for them may represent a 'promise' of 'stronger rescue' by a trusted doctor. But if these expectations are unmet, patients' feelings of uncertainty may increase and trust in health care may diminish. Being left in a state of uncertainty and worry after the consultation also easily leads to dissatisfaction with the consultation (Frostholm *et al*., 2005). This, in turn, may result in doctor shopping in an effort to find a 'better' doctor that meets the patient's expectations.

In contrast to the other reasons for worry, worry over the ability to function tended to persist after the consultation. Obviously, the ability to lead an active life and carry out daily chores was important for the patients (Johansson *et al*., 1999). Unless the patients got treatment they perceived as effective, worry related to these goals turned out to be persistent. In other words, if patients did not have confidence in adequate rescue factors, the awfulness of the complaint sustained their worry (Salkovskis and Warwick, 2001). Presumably, these patients knew what was wrong with them, as their worry did not persist because of getting no explanation for the complaint. They only wanted to get relief from their sickness, that is, control over the complaint was a key issue for them (Leventhal *et al*., 1998).

Strengths and limitations of the study

The interviews were conducted in the natural context of a primary health-care setting with genuine patients, immediately before and after an authentic consultation. This design most probably increases the credibility of the study.

Letting the patients describe their experiences in their own words offered them an opportunity to express the reasons that are personally significant to their experiences of worry and relief. This provided us new knowledge concerning the various reasons related to patients' worry and appraisals of the seriousness of their complaints that would not have been possible to reach through structured methods with preset response alternatives. In addition, by quantifying the qualitative results, that is, using mixed methods, we were able to identify the most common reasons for worry and relief.

The sample consisted of patients whose complaints corresponded fairly well to those typically met in primary care. The complaints were non-serious, and most were of fairly short duration. Some of the patients had suffered from their complaints for several months or longer and this may have increased the number of patients reporting 'inadequate treatment' as the reason for their worry.

Further research with larger samples of patients with complaints of different durations is recommended in order to examine the impact of complaint duration on patients' reasons for worry. The categories of reasons determined by our qualitative analysis may serve as a basis for constructing structured measures (eg, questionnaires).

The semi-structured interviews, conducted in the fairly definite time limits resulting from the strict time schedules of the consultations in the health-care centre, did not allow us to go deeper into the backgrounds of the patients' reasons.

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Further research using a narrative approach or clinical interviews, for example, would provide more in-depth information on patients' views on a personal level.

Conclusion

Although the small sample size of our qualitative study has to be acknowledged, our results suggest that patients are worried about a range of issues, of which uncertainty and concerns about the ability to function are the most common. The doctors can usually reassure their patients by giving an explanation, treating the complaint or by strengthening their confidence in a positive prognosis.

Our findings suggest that the GP may need to manage patients differently as they have different reasons for worry. First, some patients search for an understanding of their complaint. These cases exemplify cognitive processing of the complaint, that is, the patients primarily try to figure out what is wrong with them instead of demonstrating strong emotional expressions. They are probably the most responsive to the GP's medical explanations about their complaint and, consequently, relieved by them.

Second, some patients worry about their ability to function. This worry persists and these patients are not easily reassured after the consultation if they do not get the treatment they expect. The relief may come later if the patient witnesses a favourable effect of the treatment received. Meanwhile, it is important that the GP tries to encourage patient optimism, for example, by focusing attention on the positive measures that already have been taken and perhaps on further treatment possibilities, if available.

Third, there are patients whose reasons for worry seem to include strong emotional aspects, for example nervousness or fear for death. These patients may not directly express their uncertainty. They also seem to lack trust in health care. These patients most probably require special attention from the GP. Their reasons for worry should be carefully addressed; this may be challenging for the GP if the patient leaves their uncertainty unvoiced. The reasons for worry should be asked directly but sensitively by the doctor and responded to in a way that takes patient views and experiences of the complaints into account. Feeling they are being understood and taken seriously is essential to prevent the development of increased anxiety and to preserve patient confidence in health care. Sometimes psychological counselling may need to be considered.

Our results support the use of the patient-centred interview method in primary care settings (Larivaara *et al*., 2001). Patient-centred interviewing by a GP encourages patients to express their own views about their complaint and related concerns. In this way the doctor can discuss patients' worry and plan his or her actions according to patients' needs.

Our results suggest that the self-regulation model of illness perceptions (Leventhal *et al*., 1998) serves as an appropriate conceptual framework for understanding the worry experiences of primary health-care patients. The results of this study are in line with the cognitive-behavioural hypothesis of health anxiety (Salkovskis and Warwick, 2001). The perceived awfulness of the complaint, for example bodily damage or impaired ability to function, perpetuates worry, unless the patient has confidence in adequate rescue factors, such as effective treatment.

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