# **ORIGINAL ARTICLE**

# Health beliefs, concerns and expectations of patients presenting with non-acute pain: A preliminary study from a government health clinic in Malaysia

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#### **Abstract**

**Aim:** This study explored the health beliefs, concerns and expectations of primary care patients presenting with abdominal pain, headache and chest pain.

**Methods:** Over a 6-week period, 107 adult patients with symptoms of pain were interviewed using a semistructured questionnaire.

**Results:** The presenting symptoms of these patients were: abdominal pain, 41; headache, 35; and chest pain, 31. Females made up 53.3%; the ethnic groups were Malay (35.5%), Chinese (18.7%) and Indian (45.8%); and 71.8% of the patients had primary or secondary education. The patients' attributions of their symptoms were predominantly non-medical in all three ethnic groups. The non-medical causes mentioned include food, trauma, stress, weather changes and winds ('angin'). Only two fifths of the patients mentioned disease-specific concerns. Three quarters of these patients expected either medications or wanted the doctor to look for serious causes. Very few patients specifically wanted referral or special tests.

**Conclusions:** The patients in the study had health beliefs and concerns, in view of their non-medical focus, that was at variance with those of the health care providers. However, having decided to consult the health clinic, they were mainly looking for symptomatic relief or evaluation for serious pathology.

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Key words: concerns, expectations, health beliefs, pain.

#### Introduction

The patient who has decided to consult a physician brings with him his unique view of his illness. This illness experience includes four dimensions: (i) his health beliefs about what is wrong with him (his explanatory model or attribution of the symptom); (ii) his concerns or fears (e.g., of a specific disease or com-

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plications); (iii) the effect of the illness on his daily function; and (iv) his expectations of what should be done. Clinician-researchers at the University of Western Ontario cogently argued that physicians should refocus on the patients, in spite of the spectacular advances in the diagnostic and therapeutic modalities.<sup>1</sup> Patient-centered medicine, which has as an essential component the exploration of the illness experienced by the patient, is proposed as a solution for the unmet needs of the patients we see today.<sup>1</sup>

Pain, with its myriad sociocultural influences on the patient's behavior<sup>2</sup> is the subject of the present study. In this preliminary exploration of the patient's perspectives of his illness, we are particularly interested in finding out the extent of the disease-specific health beliefs and concerns expressed by these patients.

#### Materials and methods

#### Patient selection

Over a 6-week period, adult patients (age≥18 years) with the chief complaints of abdominal pain, headache and chest pain, were interviewed using a semistructured questionnaire. Patients presenting with any of the above symptoms were identified from the registration counter of the Klinik Kesihatan (Health Clinic) Seremban and invited to participate in the present study. There were no refusals. The interviews, conducted by three medical students, were held in a room at the Health Clinic prior to the patients' consultation with the clinic doctors.

#### Questionnaire

The questionnaire was developed after piloting an earlier version. It was written in English but was administered either in Malay or in English. (We did not translate the questionnaire as there are many local languages and dialects in Malaysia. The majority of the patients can speak in either English or Malay, the national language.) Besides the recording of demographic data, the patients were asked three questions: (i) health beliefs or attributions ('What is the most likely cause of your symptom?"); (ii) concerns ('What is the disease that you think you may have as a result of this symptom?'); and (iii) expectations ('What aspect of care do you expect the doctor to provide for you today?'). For patients who had difficulty answering the open questions above, prompts (consisting of a short list of health beliefs, concerns or expectations identified during piloting) were shown to the patients.

#### Statistical analysis

Specific medical conditions mentioned by patients as the cause of their symptoms were considered as disease-specific health beliefs while all the concerns elicited were disease-specific.

The analysis was done with SPSS version 10.2. A  $\chi^2$  test was used to look for associations between categorical variables. Significance level was fixed at p < 0.05.

## **Results**

#### Study setting

Seremban Health Clinic is a large urban polyclinic providing both general outpatient care and maternal and child health services. In 2000, there were 134096 attendances in the outpatient clinic of which 64741 attendances were new cases.

**Table 1** Characteristics of patients

	Number (%)	
Age group		
≤30	23 (21.5)	
31-40	25 (23.4)	
41–50	29 (27.1)	
≥51	30 (28.0)	
Sex	,	
Male	50 (46.7)	
Female	57 (53.3)	
Race	,	
Malay	38 (35.5)	
Chinese	20 (18.7)	
Indian	49 (45.8)	
Education level <sup>†</sup>	,	
Nil	18 (17.0)	
Primary	29 (27.4)	
Secondary	47 (44.3)	
Tertiary	12 (11.3)	

 $<sup>^{\</sup>dagger}n = 106.$ 

#### Demographic data

One hundred and seven patients were interviewed. Their primary presenting symptoms were: abdominal pain, 41 (38.3%); chest pain, 31 (29.0%); and headache 35 (32.7%). The demographic profile of the patients was consistent with those seen at a government polyclinic as shown in Table 1. The ages of the patients were between 18 and 84 years (mean 42.8 years).

# Health beliefs, concerns and expectations of patients

Twenty-four patients (22.4%) attributed their symptoms to specific diseases as shown in Table 2. The patients' attributions of their symptoms were predominantly non-medical in all three ethnic groups. The non-medical causes (i.e., not specific disease entities) mentioned were food, trauma, stress, weather changes and 'angin'. 'Angin' (winds) is a local lay etiology of illness that is rather ill-defined and arises from the perception that 'excessive accumulation of winds' in the body can cause illness. Disease-specific concerns were reported by 40.2% of the patients. In most cases, the concerns of the patients with abdominal pain and chest pain were consistent with the region of the pain. However, the patients with headaches were mainly worried about hypertension, migraine and malignancy. All patients had at least one expectation, while 55 patients had two, and 11 patients had three expectations. The expectations of these patients were mainly medication (41.6%) and looking for serious diseases (33.5%) as shown in Table 3.

The proportions of disease-specific attributions in the three symptoms were: abdominal pain, 31.7%; chest pain, 19.4%; and headache, 14.3% ( $\chi^2 = 3.531$ ,

**Table 2** Patients' health beliefs and concerns regarding the presenting symptoms

	Abdominal pain (n=41)	Chest pain ( <i>n</i> =31)	Headache (n=35)	Total (%)
Health beliefs				
None	7	11	8	26 (24.3)
Food	9	1	2	12 (11.2)
Trauma	4	2	1	7 (6.5)
Stress	4	3	10	17 (15.9)
Weather changes	0	2	5	7 (6.5)
Angin	4	5	0	9 (8.4)
Medical conditions	13	6	5	24 (22.4)
Others	0	1	4	5 (4.7)
Concerns				
None	26	19	19	64 (59.8)
Cardio-respiratory problems	0	9	0	9 (8.4)
Hypertension	1	1	7	9 (8.4)
Malignancy	1	2	3	6 (5.6)
Migraine	0	0	5	5 (4.7)
Gastrointestinal, renal				` /
and genital problems	11	0	0	11 (10.3)
Others	2	0	1	3 (2.8)

Table 3 Patients' expectation regarding the presenting symptoms

	Abdominal pain (n=65)†	Chest pain (n=51)†	Headache (n=57) <sup>†</sup>	Total (%)
Medications	30	18	24	72 (41.6)
Look for serious disease	23	20	15	58 (33.5)
Special tests	3	9	9	21 (12.1)
Medical certificate	6	3	4	13 (7.5)
Referral	1	1	5	7 (4.0)
Cure	2	0	0	2 (1.2)

<sup>†</sup> Number of expectations.

d.f.=2, p=0.171). The proportions of patients reporting any concerns in the three symptoms were: abdominal pain, 36.6%; chest pain, 38.7%; and headache, 45.7% ( $\chi^2$ =0.694, d.f.=2, p=0.707). The proportions of disease-specific health beliefs and concerns were similar by age groups, sex, ethnic groups and educational level ( $\chi^2$  test not significant).

#### Discussion

The present study documented the wide range of causes that patients attribute to their abdominal pain, chest pain and headache. Marple *et al.* in a survey of patients in the general medical walk-in clinic in the USA, reported 68% of patients with symptoms of pain worried about having serious illness.<sup>3</sup> In contrast, the patients in the present study reported fewer disease-specific health beliefs and concerns. This difference could possibly be due to variation in the level of medical literacy.

Our patients with symptoms of pain wanted the doctors to prescribe medications and evaluate for serious pathology. When specifically looked for, a signifi-

cant proportion of patients in primary care would have unmet expectations.<sup>4,5</sup> Meeting the expectations of patients may be associated with higher patient satisfaction<sup>6</sup> but not consistently so.<sup>7,8</sup> Unmet expectation can be reduced by better communication skills (e.g., active listening<sup>9</sup>) and using questionnaires<sup>10</sup> (lengthier questionnaire identified more patient expectations).

Helman<sup>11</sup> categorized the causes of lay theories of illness into four domains: within the individual (e.g., not taking care of one's diet), in the natural world (e.g., climatic conditions), in the social world (e.g., interpersonal conflicts and witchcraft) and in the supernatural world (e.g., action of gods or spirits). It appears that most of the causes reported by our patients were in the natural world, although a few patients attributed their symptoms to 'angin' – an ill-defined disturbance within the body that is not strictly synonymous with 'winds'.

Physicians who are schooled in the biomedical approach may find the perspectives of these patients somewhat perplexing. Some may even question the need to explore the patients' health beliefs, concerns and expectations. The social science literature, how-

ever, appeals to the physicians to take into account the cultural influences on the illness behavior. <sup>12,13</sup> Good and Good, and Stoeckle and Barsky demonstrated that in selected patients, the culturally aware physicians were able to bring about better patient outcomes when the patients' peculiar views of illness were sensitively explored and taken into account in the management. <sup>14,15</sup>

In a busy clinical practice, it is easy for the patient's perspectives to recede into the background and remain hidden throughout the consultation. Research coming from the West showed that patients prefer a patient-centered approach in the consultation, 16 which in turn is associated with a higher level of patient satisfaction. 17,18 However, Henbest and Fehrsen, confirmed that patient centredness in a non-Western setting was also associated with better patient outcome. 19

In the present study, we used the more timeefficient method of a semistructured questionnaire. The types of questions used and the guided nature of the interview might have limited the breadth of the patients' response. In particular, we noted that the concerns elicited were almost all disease-specific when in reality our patients may equally be concerned about social and psychological issues. Approximately one quarter of the patients did not mention any health beliefs for their symptoms, and more than half of them did not report any concerns. This was in spite of some prompting (which could have introduced some errors in the recording of their health beliefs). It is possible that the health beliefs and concerns could be underrecorded. Use of audiotape analysis or focus groups and allowing patients to speak in their mother tongue probably would have yielded a richer account of their illness experience.

# Summary of implications for GPs

We have demonstrated that the illness experience of patients presenting with pain in the ambulatory clinic can be elicited by direct questioning. The health beliefs, concerns and expectations of these patients may differ from the perspectives of the doctors in view of their non-medical emphasis. Taking the non-medical health beliefs and concerns of these patients into account is part of the holistic approach in general practice.

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