

# How does the content of consultations affect the recognition by general practitioners of major depression in women?

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## SUMMARY

**Background.** Major depression is a common and disabling condition. However, for many reasons, the condition is not recognized in about half of the patients with major depression.

**Aim.** The aim of the study was to establish whether the content of general practice consultations affected general practitioners' recognition of major depressive illness in women patients.

**Method.** The 30-item general health questionnaire was used as a first stage screening instrument for psychiatric morbidity. Patients newly recognized as depressed by their general practitioner and those not recognized as depressed who scored 11 or more on the questionnaire were interviewed, usually within three days of consulting their general practitioner, using the combined psychiatric interview. Videorecordings of the consultations for these two groups of women were analysed; analyses were based on mentions of physical, psychiatric and social symptoms and on whether the first mention of a psychiatric symptom was within the first four mentions of any symptoms (early in the consultation) or after four mentions of any symptoms (late) or if psychiatric symptoms were not mentioned.

**Results.** A paired sample of 72 women with major depression was obtained from patients consulting 36 general practitioners, each general practitioner providing one patient whom he or she had correctly recognized as being depressed and one patient whose depression had not been recognized. Women with major depression were about five times more likely to have their depression recognized if they mentioned their psychiatric symptoms early in the consultation compared with those who either left it later to mention such symptoms or never mentioned them. Major depression was more likely to be recognized if no physical illness was present. After adjusting for physical illness, depression was 10 times less likely to be recognized if the first psychiatric symptom was mentioned late in the consultation, or not mentioned at all, than if it was mentioned early in the consultation.

**Conclusion.** General practitioners need to remember that patients who present with symptoms of physical illness may

also have depression. They also need to remember to give equal importance diagnostically to mentions of symptoms at whatever point they occur in the consultation, regardless of the presence or absence of physical illness.

**Keywords:** depression; women's health; diagnosis; consultation process.

## Introduction

MAJOR depressive disorder is a common and disabling condition,<sup>1</sup> the prevalence of which is 5% in the community.<sup>2,3</sup> Of patients in the age range 16 to 64 years presenting with a new episode of illness to general practitioners in Manchester, some 13% had major depression and for about 50% of these patients their depression went unrecognized.<sup>4</sup> Blacker and Clare calculated a prevalence of 4% for major depressive disorder (research diagnostic criteria<sup>5</sup>) among 2308 consecutive patients attending an inner London practice for any reason.<sup>6</sup>

There is general agreement that an improvement in recognition of major depression by general practitioners is desirable, partly because recognition in itself seems to improve patient outcome,<sup>7</sup> but mainly because some two thirds of patients with major depression seen by general practitioners are likely to obtain rapid relief from easily available treatment.<sup>8</sup> There is considerable variation between general practitioners in their accuracy of recognizing major depression,<sup>9-11</sup> and there is room for improvement. Indeed evidence already exists that general practitioners who set out to improve their ability to identify and manage major depressive disorder can be helped to do so by group teaching.<sup>12</sup> If all general practitioners are to be trained to perform at the optimum level, it seems important to determine the factors that are associated with their failure to recognize correctly major depression among patients.

The recognition of depression might be associated with patients, in terms of their characteristics and what they say to general practitioners, or with general practitioners, in terms of their characteristics and how they interview patients. Freeling and colleagues compared the characteristics of patients whose depression was missed, without controlling for the characteristics of the general practitioners involved.<sup>13</sup> The patient characteristics associated with lack of recognition included that the patients did not look depressed, did not believe they were depressed, experienced feelings other than an exaggeration of misery, had low mean scores for depression and had physical illness contributing to their depression. Patients whose depression was unrecognized were more likely than those whose depression was recognized to have had their symptoms for more than a year. Ormel and colleagues demonstrated that patients with psychiatric illness of recent origin were more likely to have this recognized than not recognized.<sup>7</sup> The characteristics of general practitioners who are good recognizers of psychiatric illness have been described.<sup>9</sup>

A comparison of the physical, psychological, social and demographic characteristics of depressed women whose depression was recognized with those in whom depression was not recognized has been reported by the authors.<sup>14</sup> The main difference in patient characteristics was that patients with marked physical ill-

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ness were five times more likely to have their depression missed than patients with no physical illness. The findings of the study raised the question of whether the content of the consultation might be an important influence on the recognition by general practitioners of depression. It has been found that doctors who are accurate recognizers of psychological distress remain so even when they behave towards patients in ways that tend to interfere with good communication.<sup>15</sup> Patients typically wait to share psychological concerns until late in the consultation<sup>16</sup> and problems mentioned late in the consultation may be just as important as problems mentioned early.<sup>17</sup>

A study was undertaken to investigate the hypothesis that depressed patients who mention psychiatric symptoms early in the consultation are more likely to have their major depression recognized than depressed patients who mention such symptoms late in the consultation or not at all. Associations were examined between the content of videorecorded consultations of the patients studied (that is, what they mentioned to the general practitioner) and their major depression being recognized in the consultation.

## Method

The method used has been described in full elsewhere.<sup>14</sup> Forty seven general practitioners in 15 practices agreed to participate (33 men and 14 women). Their ages ranged from 28 to 70 years. All but one were principals. Their practices were urban, suburban or semi-rural and ranged from Battersea to Hampshire. The study was carried out between 1986 and 1988.

Only women were screened, in order to remove the possible confounding factor of sex on consultation style. Women were chosen because of their higher rate of depression.<sup>18</sup> Women attenders were eligible if they were in the age range 16 to 65 years, were able to comprehend and read English and to understand the purposes of the study, and had not had depression diagnosed in the previous three months. Subjects completed the 30-item general health questionnaire<sup>19</sup> (a first stage screening instrument for psychiatric morbidity) in the waiting room before their consultation and gave written consent for their consultation to be videorecorded and studied. Days and surgery times at which videorecording began were varied, and after each session the general practitioner and research assistant completed an encounter form on which was recorded all new or known diagnoses, and actions taken. The general practitioners knew the purpose of the study and each had had at least one practice session with a video-camera before data collection.

In order to determine if probable or definite major depression was present, a research interview was offered to all patients newly recognized as depressed by their general practitioner and to all those who had scored 11 or more on the general health questionnaire without being recognized by their general practitioner as depressed. (Scoring 11 or more on the general health questionnaire gives an indication of the presence of depressive illness and so the interview was required to make a diagnosis). The interview was conducted (by A T) at the surgery or the patient's home, usually within three days of the consultation. The combined psychiatric interview that was used<sup>8,20,21</sup> is based on the present state examination<sup>22</sup> and includes the research diagnostic criteria,<sup>5</sup> multiple depression rating scales, scales for severity and change of depressive illness, history of previous and present illness, relationship with physical illness, and demographic data. Physical illness judged (by A T) to be greater in severity than influenza or tonsillitis was labelled 'marked' and if equivalent to or milder than influenza or tonsillitis was labelled 'mild'.

To control for general practitioner characteristics, three consultations were obtained for each general practitioner: one with a

patient in whom major depression was recognized, one with a patient in whom major depression was unrecognized and one with a patient who was not depressed. No results for the patients who were not depressed (controls) are presented. Thus, the process continued until both a woman with newly recognized and one with unrecognized probable or definite major depression had been identified for each general practitioner or until 20 hours of consultations had been videorecorded. If more than one woman with recognized depression, or more than one with unrecognized depression, was identified the first was chosen for the study. When both types of patient, and a control patient, had been found for a general practitioner the videorecordings of their consultations were set on one side for three months to ensure that A T's memory of the interviews with patients did not contaminate analysis of the videorecordings.

The videorecordings were analysed using the 'consultation analysis by triggers and symptoms' technique.<sup>23</sup> This is a technique by which all symptoms mentioned by the patient (present or absent, prompted or unprompted) are recorded in sequence together with the doctor behaviour which immediately preceded their mention. Each time a symptom of any kind was mentioned it was counted whether or not it had previously been mentioned. Analyses were based on details of: the first four symptom mentions; the total for physical, psychiatric and social symptoms; and the position in the sequence of symptom mentions occupied by the first psychiatric symptom ('early' being classed as within the first four mentions of any symptoms and 'late' as after four mentions of any symptoms).

## Statistical analysis

Data from the consultation analyses were recorded and analysed using SAS at the University of London Computer Centre.<sup>24</sup> Symptom mentions in the groups of women with recognized depression and unrecognized depression were compared using the Wilcoxon paired test. Paired odds ratios were computed and conditional logistic regression<sup>25</sup> was used to compute odds ratios of recognition for those mentioning psychiatric symptoms early, late or not at all in the consultation, adjusted for physical illness.

## Results

During the study period, 2123 eligible patients attended the surgeries of the 47 general practitioners; 1756 (82.7%) consented to take part. Interviews were conducted with 60 women whose general practitioners had newly recognized them as depressed and with 69 who scored 11 or more on the general health questionnaire without being recognized by their general practitioner as depressed. Of the recognized group, 42 were rated as having probable or definite major depression as were 48 of the unrecognized group. Six general practitioners failed to recognize depression in any of their patients in the 20 hours of videorecording to which they were limited and five general practitioners did not miss any cases. A complete trio of patients (with recognized depression, unrecognized depression and no depression) was obtained from each of 36 general practitioners, and the 72 women with recognized or unrecognized major depression were used in the analysis.

Table 1 presents information about mentions of symptoms, by broad category, in the women with recognized major depression and women with unrecognized major depression. The median number of symptom mentions for the recognized group was twice that of the unrecognized group. These differences were mainly a result of the number of psychiatric symptoms mentioned by the recognized group of patients and there was little difference between the two groups in the number of physical symptoms mentioned.

**Table 1.** Mentions of physical, psychiatric and social symptoms by women whose major depression was recognized (36 women) and unrecognized (36 women) in their consultation.

Symptoms	Median no. (range) of mentions of symptoms by women whose depression was	
	Recognized	Unrecognized
Physical	8.5 (0-24)	11 (1-29)
Psychiatric	17 (0-37)	2.5 (0-24) ***
Social	3 (0-17)	0 (0-10) ***
Total	33 (8-62)	16.5 (4-39) ***

Wilcoxon paired test: \*\*\* $P < 0.001$ .

Two patients in the recognized group did not mention any psychiatric symptom in the consultation and two patients in this group mentioned only one psychiatric symptom in the consultation. A total of 13 of the 72 patients mentioned between 10 and 19 physical symptoms and four of the 72 patients mentioned between 20 and 29 physical symptoms.

The first mention of a psychiatric symptom was within the first four mentions of any symptoms for 21 of the 36 women whose major depression was recognized and for nine of the 36 women whose major depression was unrecognized. Fifteen of the 36 women in the recognized group and 26 of the 36 in the unrecognized group first mentioned a psychiatric symptom after the first four mentions or mentioned no psychiatric symptom. Women who mentioned a psychiatric symptom within the first four mentions were 4.7 (95% confidence interval (CI) 1.3 to 16.6) times more likely to have their major depression recognized than women who mentioned a psychiatric symptom after four mentions of any symptoms or not at all.

Table 2 presents data about the position of the first psychiatric symptom and the severity or absence of physical disease. Women without physical illness mentioned psychiatric symptoms earlier than those with physical illness. Major depression was more likely to be recognized if no physical illness was present than if there was physical illness. After adjusting for physical illness, major depression was 10.0 (95% CI 1.8 to 55.7) times more likely to be unrecognized if the first psychiatric symptom was mentioned after the first four mentions of any symptoms, or not mentioned at all, than in the first four mentions.

**Table 2.** Position of first psychiatric symptom mentioned by women whose major depression was recognized (36 women) and unrecognized (36 women) in their consultation, by degree of physical illness.

Degree of physical illness	First psychiatric symptom mentioned	No. of women with degree of physical illness/position of first psychiatric symptom whose depression was		Odds ratio <sup>a</sup>
		Recognized	Unrecognized	
Marked	1st to 4th	4	4	8.0
	≥5th/never	1	8	
Mild	1st to 4th	4	3	2.4
	≥5th/never	6	11	
Absent	1st to 4th	13	2	6.5
	≥5th/never	8	8	

<sup>a</sup>Odds ratio (unpaired) calculated for each category of physical illness.

## Discussion

The general practitioners knew that the purpose of the study was to find out how they recognized depression in their women patients. This knowledge may have led to them taking a longer history with a patient whom they suspected as being depressed. Despite this possibility, several of the consultations with patients correctly diagnosed as depressed contained few symptoms relating to depression. This may reflect reliance by the general practitioners on the non-verbal behaviour of the patient or on symptoms not generally used in the research diagnostic criteria to diagnose depression. The group of consultations in which depressed patients were not recognized becomes even more interesting if it is considered that general practitioners were conscious of the purpose of the study throughout their periods of videorecording. One criticism of this study is that videorecording consultations may change the consultations. Future research in this area could use random videorecording of general practitioners. However, most doctors soon forget the videocamera and revert to their usual consulting style,<sup>26</sup> so that a run-in period before data collection, as in the present study, is all that should be necessary to desensitize the general practitioner to the presence of the videocamera.

As might be expected, women patients without physical illness mentioned psychiatric symptoms earlier than those with physical illness but, after adjusting for physical illness, patients who mentioned psychiatric symptoms early in the consultation were 10 times more likely to be recognized as depressed than those who mentioned such symptoms late or not at all in the consultation.

It would seem therefore that the recognition of depression is likely to be patient led although general practitioners may to some degree influence when patients mention symptoms. However, 15 women who mentioned psychiatric symptoms late in the consultation or not at all were recognized as depressed. The reasons that relate to a general practitioner's ability to enquire about new problems in a consultation will be discussed in a further paper about general practitioners' interviewing styles. That the recognition of depression by general practitioners depends so heavily on the sequence of the mentions in a consultation is striking. Bucholz and Robin have described how patients who mention symptoms of depression to a doctor have worse physical health than patients who do not mention symptoms of depression.<sup>27</sup> In the present study, it was found that many depressed patients mentioned a great number of physical symptoms. In addition the authors have reported on the association between marked physical illness and the non-recognition of depression.<sup>14</sup>

In the present study, women patients who mentioned psychiatric symptoms early in the consultation were 10 times more likely to be identified as being depressed, after adjusting for physical illness. Furthermore, psychiatric symptoms were often mentioned late or not at all in the consultation by depressed patients. General practitioners need to remember that patients who present with symptoms of physical illness may also have depression; they should accord equal weighting diagnostically to mentions of symptoms at whatever point such mentions occur, whether or not the patient has physical illness. Future public education programmes may need to inform people that what they mention at the beginning of a consultation may often influence its outcome.

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