Primary Care Consultations About Medically Unexplained Symptoms: How Do Patients Indicate What They Want?

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BACKGROUND: Patients with medically unexplained physical symptoms (MUS) are often thought to deny psychological needs when they consult general practitioners (GPs) and to request somatic intervention instead. We tested predictions from the contrasting theory that they are transparent in communicating their psychological and other needs.

OBJECTIVE: To test predictions that what patients tell GPs when they consult about MUS is related transparently to their desire for (1) emotional support, (2) symptom explanation and (3) somatic intervention.

DESIGN: Prospective naturalistic study. Before consultation, patients indicated what they wanted from it using a self-report questionnaire measuring patients' desire for: emotional support, explanation and reassurance, and physical investigation and treatment. Their speech during consultation was audio-recorded, transcribed and coded utterance-by-utterance. Multilevel regression analysis tested relationships between what patients sought and what they said.

PARTICIPANTS: Patients (N=326) consulting 33 GPs about symptoms that the GPs designated as MUS.

RESULTS: Patients who wanted emotional support spoke more about psychosocial problems, including psychosocial causes of symptoms and their need for psychosocial help. Patients who wanted explanation and reassurance suggested more physical explanations, including diseases, but did not overtly request explanation. Patients' wish for somatic intervention was associated only with their talk about details of such interventions and not with their requests for them.

CONCLUSIONS: In general, patients with medically unexplained symptoms provide many cues to their desire for emotional support. They are more indirect or guarded in communicating their desire for explanation and somatic intervention.

KEY WORDS: primary care consultation; medically unexplained symptoms (MUS); psychological needs.

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INTRODUCTION

In 10–20% of patients who present physical symptoms in primary care, their general practitioners (GPs) consider the symptoms unexplained by physical disease^{1–5}. Patients with medically unexplained symptoms (MUS) have as poor a quality of life as those with comparable symptoms caused by disease^{6,7}. Many doctors find these patients challenging^{8–12} and provide disproportionate levels of health care, which is often ineffective and might sometimes increase patients' dependence^{7,13–15}.

There is a long-standing view that these patients deny psychological problems, that their presentation to GPs is intended to avoid psychological needs and to seek physical intervention¹⁶, and that GPs need to help patients think more psychologically¹⁷. However, recent evidence is hard to reconcile with this view. Before consultation, patients presenting MUS self-report that they want more emotional support from GPs than other patients¹⁸. They freely discuss psychological explanations for their symptoms with researchers^{19–21}. Like other patients²², many offer psychosocial cues in consultation, either as explanations for their symptoms or as separate problems, and most provide cues to their need for explanation for their symptoms^{3,23}. This evidence suggests that patients with MUS are transparent in communicating their needs. The present study tested this view.

Patients in general attend primary care seeking not just medical investigation and treatment, but also emotional support and explanation for symptoms, and a self-report procedure for measuring patients' desire for each kind of help is available²⁴. Qualitative evidence suggests testable predictions about how patients with MUS indicate each need. The view that these patients are transparent about psychological needs predicts that their desire for emotional support will correlate with the amount of their speech that concerns psychosocial problems or psychosocial causes for their symptoms²⁵. Patients with MUS sometimes suggest physical diseases as symptom explanations, and we predicted that this indicates not belief in the need for physical intervention, but desire for explanation^{19,25}. MUS patients sometimes prompt the GP to offer somatic intervention or to provide information about somatic interventions³, and we predicted that how much they do this indicates their desire for somatic intervention. A striking feature of patients' presentation with MUS is that new symptoms, details of previously reported symptoms, and criticisms and contradictions of previous attempts to explain or treat these emerge as consultations proceed^{26,27}. In light of the suggestion that this escalating presentation is an attempt to secure engagement from GPs that seem to resist it²⁷, we anticipated that these aspects of patients' presentation would indicate their desire for all three kinds of help.

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METHOD

Sample

The present report describes data from a study of communication in primary care consultations between GPs and patients whom the GPs consider are presenting MUS. Previous reports have described what patients seek from consultation¹⁸ and what GPs and patients say in consultation³. Here, we examine relationships between what patients say and what they seek.

We aimed to recruit consecutive patients presenting MUS to their GPs. Patients were recruited from 42 GPs (22 males, 20 females) with 5–42 years of medical experience. Practice size ranged from 1–10 GPs (mean 4.5) and 2,087–13,116 patients (mean 7,564). Six practices were urban, four were suburban, and one was rural. Jarman deprivation scores ranged from –11 to 56 (mean 21.27). The inclusion criteria, described previously^{1,3}, identify patients who, in the doctor's opinion, have unexplained symptoms. Immediately after each consultation the doctor completed a checklist to indicate whether or not the consultation: (1) involved a physical symptom that (2) could not entirely be explained by physical disease. Consultations satisfying both criteria were regarded as concerning MUS.

Because these criteria are necessarily applied after consultation, we audio-recorded consultations with all potentially suitable consecutive patients. Therefore, the researcher sought consent for audio-recording from all patients immediately after arrival at the clinic, except those: under 16 years old; who were consulting for another person; who had participated or non-consented previously; who were judged to have communication difficulties or severe distress or symptoms precluding valid consent or participation. Consenting patients were asked to complete a self-report questionnaire (see below) while awaiting consultation. The study was approved by the local ethical committee (ref. 99/120). In accordance with this approval, only audio-recordings concerning MUS were retained for analysis.

Data Collection and Coding

Each doctor operated a Sony MZ-R55 minidisk Walkman and Sony ECM-F8 Electret condenser desktop microphone to record consultations with consenting patients. Audio-recordings of consultations meeting the research criteria were transcribed verbatim after removing identifying information. The researcher coded transcripts using the Liverpool Clinical Interaction Analysis Scheme (LCIAS)³, developed specifically for primary care consultations about MUS. Informed by qualitative analyses of 36 consultations from the present data set^{25–27}, this distinguishes 25 mutually exclusive types of patient speech. The unit of coding is an 'utterance', defined pragmatically as speech that has sufficient meaning to be coded. A single speech turn (i.e., continuous speech by the doctor or patient that is preceded and followed by the other's speech) can therefore contain more than one utterance. A previous report describes the LCIAS in detail and includes coding examples³. The manual is available from the authors. The speech categories used here are summarised in Table 1. The LCIAS includes several individual speech codes that are functionally equivalent for present purposes. We therefore combined three sets of codes (Table 1). 'Psychosocial disclosure' included disclosure of new psychosocial problems or

information about ones previously disclosed in the consultation; 'symptom presentation' included new symptoms and information about previously disclosed symptoms; 'advocate somatic response' included suggestions of drugs, investigations, referrals or unspecified somatic interventions. In forming these categories, any instance of any one component code was regarded as an instance of the aggregate category.

Before consultation, patients completed the Patient Requests Form^{24,28}. This provides scores for three types of help that patients seek from their GPs (i.e., their 'intentions'). The instrument has content validity in that it arises from interviews with GP patients about what they seek^{28,29} and construct validity from factor analyses²⁴ and from correlations of scale scores with potential sources of help²⁸. Scales have high internal consistency²⁴. Scales measure the wish for: medical investigation and treatment, explanation and reassurance, and emotional support. These comprise 7, 9 and 8 items, respectively, each scored 0–2, yielding total scores varying from zero to 14, 18 and 16, respectively. Because scores are skewed, they were trichotomised as described previously¹⁸ to provide approximately normally distributed variables: scores of zero and one were coded zero; scores at the maximum and maximum minus 1 were coded 2; intermediate scores were coded 1. Patient and GP gender were noted as potential control variables.

Data Analysis

The data have potentially three levels of variability. Because each GP sees several patients, scores can vary between patients and between groups of patients seeing the same GP. GPs are clustered into practices, but preliminary analysis indicated little variability at this level. Therefore, in multilevel regression analyses³⁰, we distinguished variability at patient and GP levels. Using a Poisson sampling distribution (because the data were low-frequency counts), the log of the number of occurrences of each code was modelled as a function of the three intention scores. To allow for clustering of patients by GP, GP was a random factor in a mixed-models analysis. GP and patient gender were covariates. Intention scores were included with random slopes (allowing the influence of intention on the frequency of the speech code to vary randomly between groups of patients consulting different GPs). To protect against type 1 errors, the significance criterion was $p \leq 0.01$. Analyses used HLM5.05 and SPSS14.0 for Windows.

RESULTS

Sample Characteristics

Of 5,083 patients consulting participating doctors on study days, 75 (2%) could not be approached for practical reasons, 1,086 (21%) were excluded (mainly <16 years old or recruited previously); 3,126 (80% of the remaining 3,922) consented. GPs failed to complete checklists on 9 and identified 508 (16%) as MUS. After loss caused by GP error and machine failure, 446 of these consultations were successfully recorded (see below), of which 26 were discarded because no physical symptom was apparent or patients' companions had dominated communication. Of these, 326 (78%) provided complete data on the Patient Requests Form and are the sample for this

Table 1. Speech Categories, as Defined by the LCIAS³, Analysed in the Present Study

Category	Description	Examples
<i>Problem presentation</i>		
Psychosocial disclosure	Introduction of, or further information about, current psychosocial problem, not directly related to physical symptoms	"They found out he [grandson] had cancer" "I feel depressed"
Symptom presentation	Reports new physical symptom or further information about the nature or effects of a previously reported symptom	"I've got this burning in my legs" "It's always there"
Criticism	Tentative or explicit criticism or contradiction of previous explanation or management	"I don't think that was what was causing all this" "All they [tablets] did was make me sleep"
<i>Explanations</i>		
Physical disease	Suggests physical disease as explanation for symptoms	"It was like it might be a water infection" "Is this all 'cos of arthritis?"
Physical non-disease	Suggestion of physical cause without implication of disease requiring formal health care	"I thought it might be the menopause" "The pain was like cramp in the muscle"
Psychosocial	Indicates psychological distress or social problem, as potential explanation for physical symptoms	"I've been really stressed and I wondered it was knocking my body out of sync" "If I get anxious, that does make it worse"
Prompt explanation	Question or other prompt for GP to provide explanation or reassurance about a somatic problem	"Could that cause it" "What do you think's wrong?"
<i>Help-seeking</i>		
Advocate somatic response	Suggestion of potential or actual value of somatically oriented drug, test/investigation, referral, or other somatic intervention	"Can I have another prescription please?" "There's a thing in the paper, it said if your hair's coming out the doctor should send you for a ferritin level"
Prompt information about management	Question or prompt for information relating to actual or potential management of symptoms	"When should I make an appointment for?" "Are they [tablets] good, do they work?"
Management of psychosocial problem	Suggestion of potential or actual value of managing psychosocial problems unconnected with symptoms	"When I get out I feel better" "You said if the Seroxat didn't help with the anxiety you might give me a beta-blocker or something"
Advocate psychosocial help	Suggestion of potential or actual value of help with psychosocial problems contributing to symptoms	"I do agree that I do need to see a counsellor" "I was wondering whether, perhaps not a sleeping pill but more of a relaxing pill"

Where multiple code mnemonics are shown, categories were formed by aggregating the corresponding individual LCIAS speech codes

analysis. Non-completion was generally because patients had insufficient time before seeing the GP.

Of the 326 study patients, 210 (65%) were female; 322 (99%) were white European. Mean age was 46 years (range 16–85). They had consulted GPs a mean of 6.1 times in the previous 6 months (range 0–39) and reported a mean of 2.3 symptoms (range 1–8) in the recorded consultation. These characteristics did not differ between those providing complete and incomplete data on the Patient Requests Form. The distribution of recorded intention scores is shown in Table 2.

Relationship of Patients' Speech to Their Intentions

Findings are detailed in Table 3, in which event rate ratios (ERR) show the proportionate increase in number of instances of each speech code that is associated with one unit increase in the intentions score. For example, the ERR linking psychosocial disclosure to desire for emotional support (Table 3) indicates that a 1-unit increase (on the recorded 3-point scale) in desire for emotional support would increase the predicted number of psychosocial disclosures 3.9 times. For ERRs that were significant, Figures 1 and 2 display the predicted cumulative effects of this relationship over the observed range of counts of speech codes seen in the data. For example, the predicted number of psychosocial disclosures for patients most seeking emotional support is 3.9 times that in patients intermediate in their wish for support, in whom the number is 3.9 times that in the group seeking little or no support.

Emotional support. As predicted, patients' desire for GPs' emotional support was associated with each component of their psychosocial talk, including disclosures of psychosocial problems, suggestions of psychosocial causes of their symptoms and talk about managing psychosocial problems or requests for help with psychosocial factors contributing to symptoms. The ERRs describing each relationship were large. Where patients sought little or no emotional support, each of these kinds of speech occurred less than once per consultation on average (Fig. 1). Conversely, patients most wanting emotional support presented more than ten utterances relating to disclosure of psychosocial problems, and more than two each relating to managing these and proposing psychosocial explanations for their symptoms (Fig. 1). Although patients most wanting support were the most likely to ask explicitly for GPs' help with psychosocial factors contributing to their symptoms, this sort of request remained rare.

Table 2. Numbers (and %) of Patients Scoring at Each Level on the Recorded Intention Scores

	Score		
	0	1	2
Intention			
Emotional support	72 (22%)	234 (72%)	20 (6%)
Explanation and reassurance	21 (6%)	232 (71%)	73 (22%)
Investigation and treatment	86 (26%)	223 (68%)	17 (5%)

Table 3. Results of Multilevel Regression Analyses Testing Whether Number of Instances of Specific Speech Categories Is Predicted By Patients' Intentions

Speech category	Patient intention	ERR (95% CI)
<i>Speech predicted to indicate intention to seek emotional support</i>		
Psychosocial disclosure	Emotional support	3.90 (1.80–8.44)**
	Explanation and reassurance	0.84 (0.46–1.56)
Psychosocial explanation	Investigation and treatment	0.57 (0.31–1.05)
	Emotional support	2.24 (1.44–3.47)**
Management of psychosocial problem	Explanation and reassurance	1.44 (0.87–2.38)
	Investigation and treatment	0.78 (0.34–0.96)
Advocate psychosocial help	Emotional support	4.58 (2.08–10.08)**
	Explanation and reassurance	0.88 (0.40–1.94)
	Investigation and treatment	0.89 (0.38–2.07)
	Emotional support	5.29 (1.91–14.63)*
	Explanation and reassurance	0.60 (0.19–1.94)
	Investigation and treatment	1.34 (0.40–4.51)
<i>Speech predicted to indicate intention to seek explanation and reassurance</i>		
Physical disease explanation	Emotional support	0.93 (0.64–1.36)
	Explanation and reassurance	1.87 (1.24–2.82)*
Physical non-disease explanation†	Investigation and treatment	1.14 (0.87–1.49)
	Emotional support	0.89 (0.65–1.22)
Prompt explanation	Explanation and reassurance	1.45 (1.05–2.01)*
	Investigation and treatment	1.21 (0.88–1.67)
	Emotional support	1.12 (0.74–1.70)
	Explanation and reassurance	1.27 (0.98–1.65)
	Investigation and treatment	1.24 (0.92–1.67)
<i>Speech predicted to indicate intention to seek investigation and treatment</i>		
Advocate somatic response	Emotional support	1.11 (0.86–1.43)
	Explanation and reassurance	0.91 (0.61–1.34)
Prompt information about management	Investigation and treatment	1.20 (0.91–1.59)
	Emotional support	1.33 (0.95–1.88)
	Explanation and reassurance	0.66 (0.48–0.92)
	Investigation and treatment	1.84 (1.32–2.55)**
<i>Speech predicted to indicate all three intentions</i>		
Symptom presentation	Emotional support	1.01 (0.84–1.22)
	Explanation and reassurance	1.09 (0.94–1.25)
Criticism†	Investigation and treatment	1.13 (0.96–1.33)
	Emotional support	1.30 (1.10–1.55)*
	Explanation and reassurance	0.95 (0.79–1.14)
	Investigation and treatment	1.36 (1.15–1.62)**

* $p < 0.01$; ** $p < 0.001$. †Slopes fixed to allow analysis to converge

Covariates, not shown, were GP and patient gender. Event rate ratios (ERR) show the proportionate change in the number of occurrences of the specified speech code that is associated with a unit increase in the predictor variable (i.e., 1 SD increase in standardised intention scores). Cumulative effects of significant ratios are shown in Figures 1 and 2

Explanation and reassurance. Also as predicted, patients who proposed physical explanations, including ones that suggested a disease, wanted more explanation. The predicted association between wanting explanation and explicitly prompting the GP for it was non-significant. The ERRs were modest, indicating that the strength of patients' wish for explanation and reassurance was weakly related to the numbers of each type of utterance. Even in consultations in which patients had little or no wish for explanation and reassurance, they were likely to refer to physical disease once, whereas in consultations with patients who most wanted explanation and reassurance such speech occurred three times on average (Fig. 2). Suggestions of physical, but non-disease, explanations were rare, so this type of utterance was relatively uninformative about patients' wish for explanation and reassurance (Fig. 2).

Investigation and treatment. Associations with desire for somatic intervention partially supported predictions. Although overt suggestions of somatic intervention were unrelated to any intention, prompting GPs for information about somatic interventions was, as anticipated, associated with wanting such intervention. The ERR was modest; Figure 2 shows that,

whereas such speech occurred once per consultation in patients with little or no wish for investigation and treatment, this frequency increased to three in those most wanting this kind of help. As expected, there was no evidence that patients' suggestions of physical disease as explanation for their symptoms indicated desire for investigation and treatment.

Associations with patients' escalating and contradictory problem presentation diverged from our predictions that these types of speech would be related to all three intentions. Talk about symptoms was unrelated to any intention. Criticism was associated with desire for emotional support and for somatic investigation and treatment, but weakly (Figs. 1 and 2).

DISCUSSION

We have provided new information for GPs about what patients seek when they talk in specific ways in consultation. Our findings contradict previous views that patients deny psychological problems and overtly seek physical interventions instead¹⁶. On the present evidence, patients are open about

Figure 1. Relationships between patients' desire for emotional support and number of instances of specific speech codes. Graphs show the predicted cumulative effects of significant event rate ratios reported in Table 3. *Note that ordinate range is longer for this graph than all others.

wanting emotional support, indicate indirectly that they want symptom explanation and are guarded in expressing desire for physical intervention.

Patients were transparent in indicating their wish for emotional support. Those who most wanted support were the most likely to describe or elaborate psychosocial problems, to talk about how to manage psychosocial problems, to attribute physical symptoms to psychosocial causes or to ask for help with those causes. By contrast, patients were less transparent in indicating their wish for explanation and reassurance, which was unrelated to their requests for explanation. This intention was instead associated with their own suggestions of physical explanations for their symptoms, which is consistent with previous evidence that patients presenting MUS generally entertain physical explanations tentatively as hypotheses rather than firm beliefs¹⁹. Patients were particularly guarded in indicating their desire for physical intervention. In line with our predictions, and contrary to previous assumptions, patients' suggestions of physical explanations did not indicate desire for physical intervention. Unexpectedly, their explicit requests for somatic intervention were also unrelated to whether they wanted it. Instead, patients indicated this intention indirectly by prompting discussion about details of such interventions. In general, relationships linking speech types to desire for emotional support were larger than those linking it to desire for explanation or intervention, indicating

that patients are most revealing of their need for emotional support.

It is not clear why patients' overt requests for explanation or for intervention were unrelated to their desire for it. Similarly, it is not clear why, although patients who wanted emotional support were more likely to request their GPs' psychosocial help, this type of utterance remained relatively rare. It may be that patients avoid appearing overtly to challenge GPs' authority, particularly in the core medical areas of explanation or intervention. Whatever the reason, it is important for GPs to know that patients are indirect in communicating their desire for explanation and intervention. In particular, when patients with MUS offer disease attributions, they are not revealing belief in the need for physical intervention, but are prompting the GP for explanation.

Extended symptom presentation was unrelated to any intention. Although not predicted, this finding is consistent with the suggestion that extended symptom complaint is a product of consultation and that patients use this with GPs who appear to resist engagement³¹. That extended symptom presentation is not associated with patients' wish for somatic intervention is particularly important because such presentation drives GPs' offers of physical intervention. That is, the more that patients complain about symptoms, the more likely GPs are to propose physical intervention³². Although patients' criticisms and contradictory presentations were related to their desire for emotional support, they were related also to desire for somatic intervention. Therefore, while this kind of presentation indicates that patients are making demands on the GP, it does not indicate what those are.

The study has limitations. First, there are no agreed research diagnostic criteria for primary care patients with MUS. Criteria derived from psychiatric diagnoses have poor agreement amongst them or poor discriminating capacity^{33,34}, and use of standardised instruments can be restrictive³⁵. Because our study is focused on difficulties that patients present for doctors, we defined the study population according

Figure 2. Relationships between patients' desire for explanation and reassurance, or investigation and treatment, and number of instances of specific speech codes. Graphs show the predicted cumulative effects of significant event rate ratios reported in Table 3.

to GPs' perception. Although some symptoms identified as MUS may have pathological causes³⁶, our procedure identifies a set of consultations defined by clinicians' belief that such a cause is absent. Secondly, the measure of what patients wanted from consultation required conscious responses to a transparent questionnaire and cannot detect needs of which they are unaware. Conversely, their motivation for attending might differ from their accounts of what they would like when they attend. Qualitative research could explore these issues. Thirdly, the study was based within one area of England, and findings might not generalise. In addition, GPs who agree to such research may be particularly interested in psychosocial care³⁷, and strenuous efforts will be needed to engage a broader range of GPs in future research. Larger samples will be needed to study heterogeneity amongst GPs as well as patients. Finally, we lacked a comparison group without MUS, so cannot tell whether our findings apply more generally than to MUS. MUS patients take more time and doctors are less likely to explore and validate their symptoms³⁸, which suggests that some of these communication processes could operate differently in consultations about explained symptoms. However, a complete demarcation between explained and unexplained symptoms is impossible³⁶, and physicians miss opportunities to acknowledge psychosocial cues during routine consultations with any patients²². It will therefore be important to test the generalisability of these findings across primary care settings and with GPs with varying attitudes to psychological care, as well as in patients without MUS.

Nevertheless, our findings already have potential implications for clinical practice, education and training. They are incompatible with the influential view that patients with MUS do not present their psychological needs and that GPs therefore should help them think more psychologically. Instead, confirmation of our findings would indicate that GPs should identify and respond to patients' overt presentation of psychological needs, while being sensitive to more covertly expressed somatic concerns. Training GPs to manage MUS has had variable success³⁹⁻⁴¹. Our findings might inform future training by indicating specific communication strategies to help GPs manage patients with MUS. GPs may relatively easily facilitate psychological discussion with patients that seek it, by identifying and responding to their psychological cues and thereby potentially avoiding somatic intervention that patients do not want and that GPs think unnecessary⁴². Contrary to the common view that GPs need to help patients with MUS recognise and express psychological needs, it seems that GPs may need to seek patients' views more actively about somatic intervention.

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