

Experts' opinions on the management of medically unexplained symptoms in primary care. A qualitative analysis of narrative reviews and scientific editorials

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Background. The feasibility as well as the suitability of several therapies for medically unexplained symptoms (MUS) in primary care applied by the family physician (FP) appeared to be low. FPs need effective and acceptable strategies to manage these functionally impaired patients.

Objective. To review important and effective elements in the treatment of patients with MUS in primary care according to experts in MUS research.

Methods. We performed a systematic search of narrative reviews and scientific editorials in Medline and PsycINFO and triangulated our findings by conducting a focus group with MUS experts.

Results. We included 7 scientific editorials and 23 narrative reviews. According to MUS experts, the most important elements in the treatment of MUS are creating a safe therapeutic environment, generic interventions (such as motivational interviewing, giving tangible explanations, reassurance and regularly scheduled appointments) and specific interventions (such as cognitive approaches and pharmacotherapy). Furthermore, MUS experts indicate that a multi-component approach in which these three important elements are combined are most helpful for patients with MUS. In contrast to most specific interventions, opinions of MUS experts regarding generic interventions and creating a safe therapeutic relationship seem to be more based on theory and experience than on quantitative research.

Conclusions. MUS experts highlight the importance of generic interventions and doctor–patient communication and relationship. However, studies showing the effectiveness of these elements in the management of MUS in primary care is still scarce. Research as well as medical practice should focus more on these non-specific aspects of the medical consultation.

Keywords. Doctor–patient relationship, family medicine, mental health, patient-centred care, qualitative research.

Introduction

Medically unexplained symptoms (MUS) are somatic symptoms that cannot be attributed to a clear organic cause after appropriate medical assessment.¹ MUS are a common and important problem in primary care. In 19%–50% of all symptoms seen in primary health care, no evidence can be found for any physical disease (i.e. MUS).^{2–4} Most of the time MUS are transient and self-limiting and do not need further medical attention after one or two consultation(s). A recent Dutch study found that only 2.5% of the attendees in general practice presenting with MUS meet

criteria for chronicity.^{5,6} However, this minority of patients represent a major problem in health care. These patients suffer from their symptoms, are functionally impaired and are at risk of unnecessary and possibly harmful tests, referrals and treatment.^{4,7} Moreover, scarce health care resources are wasted without clinical benefit.² This leads to frustration for both doctor and patient.

There is an often complex overlap between MUS and common mental health problems, both longitudinally and cross-sectionally.⁸ For example, somatic symptoms are common in many psychiatric conditions, such as anxiety or depressive disorders, and of primary

care patients with a diagnosable psychiatric disorder, 50%–70% initially present with somatic symptoms.^{9,10}

Several treatments for patients with MUS have been described, with considerable recent research focused in primary care. Some studies show that antidepressants and cognitive behavioural therapy (CBT) are effective in the treatment of persisting MUS, improving symptoms and functional status and reducing psychological distress.^{11,12} Reattribution therapy, a structured intervention to provide an explanation of the mechanism of patients' symptoms through negotiation and patient-centred communication,¹³ is probably not effective as three of four trials do not show any benefit.¹⁴ Moreover, in one randomized clinical trial (RCT), reattribution training by FPs was associated with decreased quality of life.¹⁵ While family physicians (FPs) face a considerable workload from patients with MUS, the applicability of CBT is limited because many patients do not accept CBT as they do not consider their complaints to be 'psychological'. Thereby, a coherent and integrative model of disease mechanisms combining predisposing, precipitating and perpetuating factors is lacking.¹⁶

Moreover, the application of medication is generally seen as less suitable as it is a passive form of treatment.¹⁷ In conclusion, the evidence in this field is that specific interventions for patients with MUS are at best of limited help for FPs.

Therefore, to improve the care for patients with MUS, it seems valuable to consider expert opinions on effective management strategies for patients with MUS. Scientific editorials and narrative reviews are an important resource to learn about the opinions of leaders in the field.¹⁸ We decided to study the elements experts consider important and effective in the management of MUS in primary care.

Methods

We performed a systematic review with qualitative analysis of editorials and narrative reviews. Both types of papers are usually written by experts in the field. Scientific editorials allow leaders of research and clinical communities to communicate with each other and are a forum for the expression of widely shared expert beliefs and opinions.¹⁸ Narrative reviews tell us what is known about therapies for patients with MUS according to experts in the field. The information obtained from the analysis of the systematic review was triangulated by a focus group with Dutch experts in the field.

Data sources and search strategy

In October 2009, we performed a systematic search in Medline and PsycINFO for narrative reviews and scientific editorials about MUS. We used two search strings and combined these with the Boolean operator AND. The first string consisted of terms indicating

somatization (for example somatization, somatoform disorders, functional somatic syndrome, symptom, medically unexplained). The second search string included terms for treatment (for example therapy, intervention). The search strategy for Medline (see Appendix 1) was adapted for PsycINFO. We pretested the search strategy on five important articles that should be included in our study. Furthermore, we obtained additional references from the reference list of retrieved articles by systematically checking these.

After reading several articles, we found that ideas and statements published in articles in the years before 2004 were reviewed and discussed in more recent articles. Therefore, we limited our search strategy to articles published in the last 5 years.

Selection of studies

Two reviewers (MH, physician with an interest in MUS and TCoH, FP with an interest in MUS) independently read all titles and abstracts for inclusion. The full texts of the included abstracts were read by one reviewer (MH) who once again checked for inclusion and exclusion criteria before definitive inclusion. When in doubt, she consulted the other reviewer (TCoH). Inclusion criteria were narrative reviews or scientific editorials focussing on the management of patients with MUS. We excluded papers that focused primarily on diagnosis or classification. As we were interested in important elements in the management of undifferentiated MUS and not in the management of specific symptoms or syndromes (for instance melatonin for fibromyalgia or probiotics for irritable bowel syndrome), we excluded articles about specific syndromes or single unexplained symptoms. We focused on undifferentiated MUS as we assume that these are more difficult to handle for the physician than single symptom unexplained disorders and functional syndromes: the latter give more opportunity for guideline-based management or a specific referral to a medical specialist with specific interest regarding functional syndromes. Papers on children and adolescents (age <18 years) and papers on specific groups of patients (for example refugees, commercial sex workers) were excluded as well. We calculated the inter-reviewer agreement in article selection based on title and abstracts with kappa statistics.¹⁹ Disagreements were resolved during a consensus meeting.

Analysis

We qualitatively analysed the included scientific editorials and narrative reviews to explore expert opinions about important elements in the management of MUS. Analysis followed the principles of constant comparative analysis, in which included studies are subsequently thematically coded.²⁰

Two reviewers (MH and TCoH) independently read two articles (one editorial and one narrative review) to

develop a coding scheme. Initial codes were discussed, seeking agreement on their content. After the two reviewers agreed on the coding scheme, one reviewer (MH) coded one editorial and one narrative review. This initial coding was checked by the second reviewer (TCoH). Since no significant discrepancies were discovered, the first reviewer (MH) proceeded to code the entire data set. In the event of doubt or ambiguity, the first reviewer (MH) sought the opinion of the second reviewer (TCoH). During such a consensus meeting, the coding scheme was reviewed and if necessary modified. Subsequently, the transcripts were recoded with the modified coding scheme. We used Atlas.ti qualitative data analysis software for coding and recoding the transcripts. We grouped the codes into themes to identify key features of experts opinion. Recurrent and important themes, identified by the researchers, were frequently discussed and refined as part of an ongoing iterative process.²¹ During the entire analysis, we constantly matched the developing themes with the transcripts. Therefore, these repeated themes are grounded in the data and not imposed onto the data by the researchers.

To triangulate the results of our qualitative analysis, we conducted a focus group meeting. We invited FPs who are participating in the guideline committee on MUS in primary care of the Dutch College of General Practitioners. The participants' characteristics are listed in Table 1. All five have a specific interest in managing patients with MUS in primary care. Moreover, three participants did their PhD in this field.^{22–24} Following the guidelines for conducting focus groups, we used an interview guide to direct the discussion and to fulfill the research aims. This interview guide was based on the key themes we identified during the analyses of the articles (Table 2). The discussion was facilitated by a moderator (MH) and lasted for ~1 hour. We audiotaped the discussions in the focus group, transcribed the text and entered it into Atlas.ti. Next, we analysed with two reviewers (MH and

TCoH) the text according to the principle of constant comparative analysis and compared the results with the findings from the systematic review.

Results

We retrieved 960 articles from the electronic databases (572 Medline and 388 PsycINFO). A total of 74 articles found with PsycINFO had already been found in the Medline search (Fig. 1). After screening the titles and abstracts, 53 papers fulfilled the inclusion criteria. The inter-reviewer agreement was $\kappa = 0.89$ (95% confidence interval: 0.83–0.96). The full text of 7 of the 53 articles was not available in the Nijmegen library and the authors (living outside The Netherlands) had to be asked for a copy. As after 9 months no response came, these papers could not be included in this study. After reading the full publication, we included 30 of the 46 articles in our analysis. These articles concerned 23 narrative reviews and 7 scientific editorials.^{25–54}

During the analysis of the included articles, we distinguished four key themes describing the important elements in the management of MUS in primary care according to opinion leaders in the field: (i) creating a safe therapeutic environment, (ii) generic interventions, (iii) specific interventions and (iv) multi-component approach. These themes will be discussed below.

Creating a safe therapeutic environment

According to experts in the field, a doctor has to actively create a safe therapeutic environment before he/she starts a therapy. In such a safe therapeutic environment, the patient should have the opportunity to talk freely about the symptoms and problems that bother him/her. Experts state that a good doctor–patient relationship and good communication are necessary to create such an environment.

Doctor–patient relationship. In 17 of the 30 included papers, the importance of the doctor–patient relationship is stressed. However, only one expert referred to quantitative evidence from a randomized clinical trial, which studied the effectiveness of a patient-centred method to establish a good patient–provider relationship.³⁵

Experts suggest that a good doctor–patient relationship is necessary for a treatment to be effective. A doctor can achieve this by being empathic, by showing the patient that he/she takes the problems and symptoms seriously and that he/she is willing to help the patient.

Conversations in the primary care setting usually take place in the context of long-standing, trusting doctor–patient relationships. Such relationships have been shown to be an important factor in the healing process.⁴⁴

TABLE 1 Characteristics of participating FPs in the focus group discussion

Characteristics	Number of family practitioners
Gender	
Male	1
Female	4
Working hours	
Full time	0
Part time	5
Type of practice	
Solo	0
Duo	2
Group	3
Age in years (range)	51.4 (48–56)
Experience as a FP in years (range)	18.6 (10–25)

TABLE 2 Focus group interview guide

Opening	What are important elements in the management of patients with MUS? How do you implement this in a consultation?
Creating a safe therapeutic environment	What are important elements in the management of patients with MUS that create a safe environment? How do you implement this in a consultation?
Generic interventions	What are important elements in the management of patients with MUS that belong to this theme? How do you implement this in a consultation?
Specific interventions	What are important specific treatments for patients with MUS? How do you implement this in a consultation?
Multi-component approach	What are important steps in the management of patients with MUS? How do you implement this in a consultation? When do you take which step?
End	Would anyone like to add elements in the management of patients with MUS that are not discussed today?

The doctor legitimized the patient's suffering, removed blame, and created a therapeutic alliance. The symptom and emotion were thereby linked.⁴³

A good doctor–patient relationship is not only important at the start of the therapy, according to experts, but also during the course of the treatment. Doctors should find a way to deal with the doctor–patient relationship problems, which they face in the contact with these patients.

During the course of treatment, a relationship of mutual trust with the patient should be maintained, but if some problem occurs, it should be addressed directly with the patient in a descriptive, yet non-judgmental manner.⁵⁴

Doctor–patient communication. In 18 of the 30 included narrative reviews and editorials experts discussed the doctor–patient communication. However, none of the MUS experts described quantitative evidence for the effectiveness of the doctor–patient communication.

According to experts, clear and focused communication is an important element in creating a safe therapeutic environment. This means that a doctor should listen carefully to his patient and question the patient extensively about the symptoms, the consequences of the symptoms for daily life and what the symptoms mean to the patient. It is also important to ask the patient about his/her cognitions, emotions, fears and

concerns regarding the symptoms. The doctor has to try to understand the patient's beliefs, sources of information and knowledge gaps.

Better communication has been associated with higher satisfaction in a number of studies, as well as greater adherence and lower rates of litigation, but few studies have found a relationship between communication and disease or symptom outcomes.³⁵

Successful management of patients with MUS has to address the subjective illness perceptions, possibly underlying illness fears and information-processing biases. However, this requires not only knowledge about the patient, but also behavioural skills in the doctor.³²

MUS experts stressed that a clear and focused communication between doctor and patient can enhance the doctor–patient relationship and results in a more patient-centred explanation and management of the symptoms. Furthermore, when the influence of psychosocial factors has been elicited in an early stage of the consultation, the relevance of psychological factors becomes more acceptable for the patient.

To provide the patient with a qualifying explanation, it is necessary to thoroughly explore the patient's illness beliefs and symptom worries. Identification of the patient's dysfunctional beliefs and behaviours lends the possibility of helping the patient to modify them.²⁷

Moreover, early recognition and communication of the fact that symptoms may not result from organic disease, and early appreciation of the role of psychosocial factors, may improve outcomes.³⁴

In two papers, experts mentioned, without providing quantitative evidence, that giving a summary during MUS consultations may be important.^{32,34} This summary should include relevant physical, psychological, social factors and possible links between them. According to the MUS experts, giving a summary is a way of showing that the doctor is an attentive listener and is interested in the patient's symptoms and problems. Furthermore, it helps the doctor to uncover the patient's opinions and expectations and whether or not the patient agrees with the treatment plan.

Generic interventions

Motivational interviewing. In 13 of the 30 included papers, MUS experts mention motivational interviewing to stimulate patients' motivation and to enhance the efficacy of specific interventions. However, the experts do not refer to quantitative evidence for motivational interviewing. According to the MUS experts, doctors should, for example, encourage appropriate

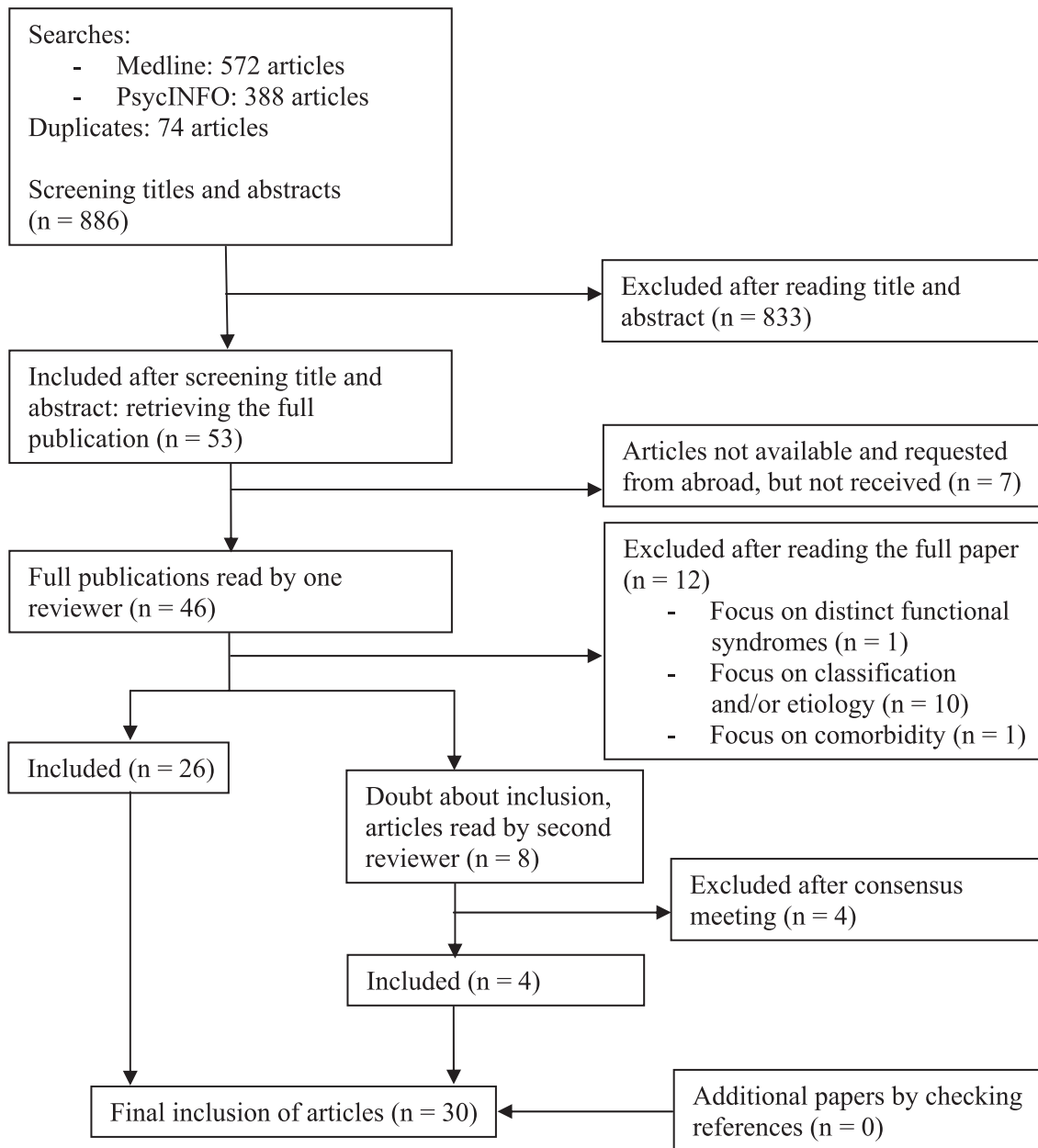


FIGURE 1 Selection of studies

activating behaviour. Furthermore, they have to give patients practical and positive advice for lifestyle changes, which they can apply straight away. Examples are recommendations for (graded) exercise, dietary advice, sleep routine, stress reduction and relaxation.

The essence of these recommendations is: to convey to the patient that his symptoms are real, to offer positive advice and treatment and to engage the patient in an active role in alleviating the often chronic symptoms. [...] The evidence of non-pharmacological passive treatments, be they invasive or non-invasive, seems to be weaker than the evidence of non-pharmacological treatments that involve active patients' cooperation.³³

Encourage patients to bring about change in lifestyle and diet, such as exercising, maintaining regular hours and stopping use of alcohol, caffeine, nicotine and so forth.⁵¹

Furthermore, MUS experts stressed the importance of involving patient's allies (family, friends, etc.) in the management of MUS in primary care. In this way, patients would be more motivated to make important lifestyle changes.

Explanation. The importance of explanation of the symptoms in the management of MUS is mentioned in 22 of the 30 included papers. In none of the papers,

MUS experts referred to publications quantitatively studying the effectiveness of explanations. According to the experts, a doctor should be able to give the patient a tangible explanation for his/her symptoms, which links the physical complaints with contextual factors and psychosocial influences. Giving the patient a positively formulated explanation with practical advice for management would enhance treatment outcome. They state that explanations should be person centred and adjusted to the patient's cognitions and illness beliefs. However, MUS experts do not give clear examples of explaining the symptoms to patients.

Explanations should integrate psychological and biological factors and provide patients and doctors with a model for managing the condition.²⁶

Reassurance. In 16 of the 30 included papers, the importance of reassurance is highlighted. None of the MUS experts described the effect of reassurance quantitatively. In one narrative review, an expert described that the effect of diagnostic testing depends on what patients think a normal result means.²⁶

MUS experts suggest that doctors should explain, educate, give advice and communicate in positive terms, in order to reassure the patient. Sometimes additional tests or referrals will be necessary to reassure the patient. They suggest that prior to the diagnostic tests, the doctor has to explain what a normal test result will mean. Moreover, the doctor should explain what the next step will be if the results are normal and the symptoms persist. Furthermore, while making the choice for further tests or referral, a doctor should consider the risk of iatrogenic harm caused by the additional investigation or referral, according to the MUS experts.

Discuss the planned examinations and their consequences with the patient as early as possible. Anticipate when you will stop with medical investigations. Avoid unnecessary medical investigations and petty diagnoses.³⁴

Some MUS experts mention that normalizing symptoms and test results are likely to be more beneficial.^{27,34}

Regularly scheduled appointments. In 9 of the 30 included narrative reviews and editorials, MUS experts indicated that regularly scheduled appointments should have a place in the management of patients with MUS in primary care. One expert stated that evidence from randomized controlled trials suggests that regularly scheduled appointments; performing a brief physical examination at each visit, to look for signs of disease rather than relying on symptoms and avoiding investigations and hospital admissions, unless clearly

indicated, decrease health service use and increase physical functioning.²⁶ However, the effect of counselling is not described quantitatively. According to MUS experts, these regularly scheduled appointments enhance the doctor-patient relationship.

A schedule of regular, brief follow-up office visits with the physician is an important aspect of treatment. This maintains the therapeutic alliance with the physician, provides a climate of openness and willingness to help, allows the patient an outlet for worry about illness and the opportunity to be reassured repeatedly that the symptoms are not signs of a physical disorder, and allows the physician to confront problems or issues proactively. Scheduled visits may also prevent frequent and unnecessary between-visit contacts and reduce excessive health care use.²⁹

Specific interventions

In the included publications, MUS experts commented about the specific treatments: (i) cognitive approaches, (ii) pharmacotherapy, (iii) activating therapy and (iv) complementary and alternative medicine.

Cognitive approaches. Almost all experts (in 28 of 30 included papers) stress the importance of cognitive approaches in the management of MUS. Of these cognitive approaches, they most often mention CBT. Although they had different opinions about the magnitude of the effect of CBT, many experts described the evidence quantitatively. For example, one expert stated that the results of 31 CBT controlled trials for treatment of somatoform disorders showed that with CBT, patients improved more than controls in 71% of the studies.⁵⁴ Another expert stated that 82% of patients with MUS receiving CBT and 64% of control subjects had improved or recovered at 6-month follow-up and that this difference was maintained at 12-month follow-up.⁴³ However, a third expert pointed out that the results of the effectiveness of CBT were no longer significant after controlling for covariates.⁴⁴ Furthermore, Henningsen described moderate evidence for the effectiveness of CBT in patients with MUS or somatoform disorder.³³ Interpretation of the effectiveness of CBT seems complicated as most of the time different variants of CBT are studied. Moreover, it is not clear which specific elements make the CBT effective.

In CBT, the therapist structures the patient's social and physical environment to promote appropriate behaviour (in this case, healthy social and personal adjustment without somatisation) and discourage inappropriate behaviour (that is, illness behaviour and preoccupation with physical symptoms).⁴³

Other cognitive therapies studied in the literature are relaxation training, reattribution, biofeedback, body mentalization therapy and other forms of psychotherapy. Most experts state that their contents and results are very heterogeneous, which hampers drawing conclusions regarding their effectiveness.

Pharmacotherapy. In 23 of the 30 included papers, MUS experts discussed the importance of pharmacotherapy in the management of MUS. They suggested that antidepressants can be helpful and provided quantitative evidence for its effectiveness. For example, one expert stated that a systematic review of 94 RCTs with a total of 6595 patients with MUS found that antidepressants significantly improved symptoms (number needed to treat four).²⁶ However, one expert stated that a literature search did not reveal any published controlled studies evaluating the efficacy of pharmacotherapy for MUS (either the full or the abridged somatization disorder diagnosis).⁴⁵ According to MUS experts, antidepressants can reduce symptoms of often co-morbid depression of anxiety disorders. Furthermore, they might also be helpful in relieving symptoms, like pain, in the absence of a co-morbid psychiatric disease. However, the doctor-patient relationship and communication may also play a role in the effectiveness of antidepressants, according to the experts.

A literature review including a qualitative comparison of information on understanding and treatment of medically unexplained somatic symptoms was carried out by Burton (2003). He found that CBT and anti-depressant drug are both effective treatments, but their effects may be greatest when the patient feels empowered by the doctor to tackle his or her problem.⁵⁵

We found some comments on other pharmacotherapeutic agents being studied in the literature, including anxiolytics. However, according to MUS experts, there is not much evidence for their effectiveness in the management of MUS.

Activating therapy. Although in 11 included papers MUS experts described the possibility of activating therapy, none of them describe quantitative evidence for the effectiveness of this therapy. A lot of different activating therapies like graded exercise, physiotherapy and revalidation are mentioned by the experts. The experts suggest that these therapies can be beneficial in some functional somatic syndromes when combined with other therapies. According to MUS experts, patients should agree with the activity. Furthermore, the activity should be person centred and relevant to the individual situation and be structured so that it gradually increases. Doctors also need to tell

the patient that he/she might feel temporarily worse but that there will be benefits in the long term.

Expressive therapies like creative therapy or writing disclosure are also mentioned by MUS experts. However, they state that these therapies, like exercise therapies, seem mostly beneficial in combination with other therapies.

Cognitive techniques, psycho-education and attention training are suggested to alter cognitive-perceptual factors, and should be combined with the modification of illness behaviour and graded activity.⁴⁷

Complementary and alternative medicine. In four papers, MUS experts discussed the application of complementary or alternative medicine in the management of MUS. Quantitative evidence was not mentioned. One expert argued that St John's Wort showed excellent efficacy on standardized assessment instruments and outcome measures.⁴² Some experts mentioned hypnotherapy for the management of MUS. However, the experts stated that it is not clear which specific element of these therapies is effective.

A couple of interesting placebo controlled trials have recently been published reporting on the efficacy of St John's wort in the treatment of somatization disorder, undifferentiated somatoform disorder and somatoform autonomic dysfunction (Volz, Murck, Kasper & Moller, 2002; Muller, Mannel, Murck & Rahlfs, 2004). A Set of standardized assessment instruments and outcome measures were used in both studies and the data showed excellent efficacy, tolerability and safety of St John's wort, independent of any existing depressive symptomatology.⁴²

Multi-component approach

In most scientific editorials and reviews experts indicate that management of MUS should consist of a multi-component approach whereby creating a safe therapeutic environment, and general and specific interventions are combined. MUS experts often mentioned the stepped care model. In this model, severity and chronicity of the symptoms guide the management.

Such findings lead to recommendations for stepped care as a basis for routine care:²⁸

Step 1: Reassurance, advice, and explanation in the medical clinic;

Step 2: Reassessment, more extended CBT-based discussion and encouragement of self-help;

Step 3: Reassessment, sessions of CBT or other specialist care.

Results of focus group of experts in the field

The experts in the focus group discussion were inclined to discuss the importance of a safe therapeutic environment (clear and focused doctor–patient communication) and generic interventions (reassurance and explanations).

. . . most important is that people feel they have been taken seriously. Therefore attention and providing the opportunity to discuss all questions and concerns. (FP5, female, 25 years FP working experience.)

Furthermore, participants suggested the importance of a thorough exploration of patients' somatic symptoms, beliefs and concerns and consequences of these symptoms on patients' daily activities, social environment and illness behaviour in order to reach a better understanding of the patients' symptoms and problems.

All symptoms have certain dimensions and the physical dimension is just one of them. However each symptom results in emotions, cognitions and illness behavior. I think that all these dimensions are important to explore. To look at all these dimensions together with the patient. Sometimes, most of the time, you will find a starting-point for an intervention in one of these dimensions. (FP4, female, 24 years FP working experience.)

Some participants used a symptom diary during the MUS consultations as a tool to explore the cognitions and emotions of the patient. In this symptom diary, the patient should write the moment of occurrence of the symptoms and his/her thoughts, fears and actions at that moment.

I ask patients to write down their own thinking, especially the thoughts not directly related to disease. (FP3, female, 10 years FP working experience.)

The participants also indicated the importance of giving the patient a positive tangible explanation and practical advices. However, they did not give examples of such explanations and advices. Furthermore, they stressed the value of discussing psychosocial factors influencing the symptoms at an early stage in the management of these patients.

You have to explain patients at an early stage that you will use a somatic as well as a psychosocial pathway during the management of their unexplained symptoms. (FP1, 15 years FP working experience.)

The participants mentioned CBT, reattribution and referrals to psychiatrist, psychologist or physiotherapist

as specific interventions. They also stressed the importance of a good working relationship with these caregivers.

I try to teach the patient cognitive techniques, relaxation exercises, or I refer them to a physiotherapist. (FP 2, 18 years FP working experience.)

The participants agreed that the management of MUS should consist of a multi-component and stepwise approach. The severity of the symptoms and problems makes the FP decide what the next step in the management will be.

It is nonsense to think that there should be one management for MUS. It really depends on the type of symptoms, the type of patients and all dimensions that influence these symptoms. (FP4, female, 24 years FP working experience.)

When we compare the results from our literature review with the results of the focus group discussion, we conclude that no additional therapeutic elements were found. However, the participants of the focus group discussion explicitly emphasized the importance of a safe therapeutic environment and generic interventions. Furthermore, participants of the focus group discussion indicated that the management of patients with MUS should consist of a multi-component approach in which creating a safe therapeutic environment, generic and specific interventions are combined.

Discussion

Summary of main findings

According to MUS experts in the field, the most important elements in the management of MUS in primary care are (i) creating a safe therapeutic environment through a good doctor–patient communication and an effective doctor–patient relationship, (ii) generic interventions such as motivational interviewing, giving tangible explanations and reassurance and (iii) specific interventions such as cognitive approaches and pharmacotherapy. However, in contrast to most specific interventions, experts rarely describe the effects of generic interventions, doctor–patient communication and relationship quantitatively in their scientific editorials and narrative reviews. MUS experts indicate that a multi-component approach in which these three important elements are combined are most helpful for patients with MUS.

Comparison with the literature

MUS experts stress the importance of generic interventions, clear and focused communication, preserving the doctor–patient relationship and other non-specific aspects of the consultation such as described in the

patient-centred clinical method in order to affect the outcome of consultations and to reach a therapeutic consultation.^{56,57} However, they do not describe the effects of these interventions quantitatively. Although the management of MUS (especially in secondary care) as well as research in this area focus on planned approaches and specific treatments, we assume that these non-specific aspects of the consultation elements, although important for all medical problems, are specifically relevant for the management of MUS because of the paucity of effective interventions.

In recent years, several treatments of persistent unexplained symptoms have been introduced in primary care such as CBT, reattribution therapy, disclosure, group psychotherapy, psychiatric consultation, etc.^{23,58–61} However, their effectiveness is questionable and sometime these interventions may be counterproductive.⁶² Experts' opinions about the importance of the therapeutic environment, the doctor–patient relationship and communication and the importance of generic interventions indicate an important focus for practicing physicians to manage patients with MUS. These factors fit well into the domain and the principles of primary care.⁶³ These elements should be applied in routine daily practice, regardless of the origin of the symptoms. The doctor as medicine, as Balint stated years ago, might still be the most important and effective intervention for patients with MUS.⁶⁴

Recent studies suggest that doctors and patients have very different perspectives on MUS and doctors' communication skills.⁶⁵ They suggest a mismatch between what patients with MUS want and what they actually receive from their FP. Salmon *et al.*⁶⁶ showed that patients with unexplained symptoms often present opportunities for FPs to address psychological needs. FPs' engagement with these cues, however, seems limited. Furthermore, some FPs provide reassurance without a clear explanation of the symptom, while patients wish to have a convincing, legitimating and empowering explanation.^{67–70} Finally, FPs generally showed less empathic responses towards patients with MUS.^{71,72} These findings might explain why an effective and clear communication with patients with MUS might not be as straight forward as it seems and why implementation of the results of this study in daily practice may be complex.

Although our study revealed important elements in the management of MUS in primary care, we did not study the effectiveness of these elements. The effectiveness of these separate elements is still not well known. Research in the future should address these issues in order to improve the care for all patients in primary care, especially those with MUS.

Strengths and limitations of this study

This study gives a broad overview of important elements in the treatment of MUS according to opinion

leaders. Our findings regarding the specific interventions like cognitive approaches and pharmacotherapy were expected on beforehand. However, as these specific interventions do not help the FP much in daily practice, our findings regarding the more generic interventions are even more important. The fact that we found limited references and quantitative descriptions of the effect of creating a safe therapeutic environment and generic interventions reflects the necessity to study the effects of these non-specific aspects of the medical consultation. Although such studies might face methodological problems of measuring the effect of these elements on patients' outcome, there are a view good examples of these kind of studies in primary care. Thomas⁷³, for example, showed the importance of being positive during consultations with patients with MUS in primary care, whereas van Os *et al.*⁷⁴ examined the effect of depression treatment, empathy and support and their interaction on patient outcomes for depression in primary care.

By performing our search in only two databases (PubMed and PsycINFO), we might have missed some important editorials regarding the management of MUS. However, most important and high quality peer reviewed journals will be presented in our search. Furthermore, we pretested our search strategy on important publications about MUS in our own database and we could retrieve all of them by searching in PubMed and PsycINFO. Our good inter-observer agreement for inclusion and exclusion enhanced the quality of our literature search. Furthermore, by developing a coding scheme by two independent reviewers and checking the coding process of two papers, we concluded that one reviewer (MH) was able to code the entire data set. Finally, by conducting a focus group discussion in addition to the qualitative analysis of the literature study, we were able to triangulate our findings with opinions of experts in the field.

One could argue that there is some overlap between the key themes that we could distinguish in this study. For example, creating a safe therapeutic environment is interconnected to most generic interventions. Furthermore, some generic interventions, such as motivational interviewing, could also be considered as a specific intervention. However, after an in-depth discussion during the iterative process of analysis, we decide to categorize the different element into one of the key themes: creating a safe therapeutic environment, generic interventions or specific interventions.

As we only included scientific editorials and narrative reviews, we could not check whether or not the opinions and statements mentioned in the papers were in concordance with the findings of the original studies. For example, some experts stated that normalizing symptoms is likely to be beneficial while recent literature suggested that this is controversial.⁶⁹ Furthermore, MUS experts did not give clear examples of

how to explain the symptoms to patients while examples of explanations in primary care research do exist.⁶⁹ However, by conducting a focus group discussion in addition to the literature study, we were able to check if experts in the field of MUS agreed with the opinions found in the narrative reviews and scientific editorials. One could argue that by only including narrative reviews and scientific editorials published in the last 5 years and not including original research, important elements in the management of MUS (such as the narrative medical approach) have been missed. However, the validity of our findings was explored by checking our results during a focus group discussion with experts in the field. No new elements in the management of MUS appeared from this discussion. Furthermore, they judged the results to be consistent with their perceptions and experiences.⁷⁵

Conclusions

The experts' opinions on management of MUS seem to be more based on theory and experience than on high quality research. Although opinion leaders do not describe the evidence regarding its effectiveness quantitatively, they emphasize the importance of creating a safe therapeutic environment and other generic interventions. Furthermore, in accordance with the evidence regarding the effectiveness of specific interventions (i.e. cognitive approaches and pharmacotherapy), experts indicate specific interventions as important elements in the management of patients with MUS. Creating a safe therapeutic environment and generic interventions such as motivational interviewing, explanation, reassurance and regularly scheduled appointments might be key to improving the management of patients with MUS in primary care.

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Appendix 1. Search strategy

(somatoform disorders[mesh] OR somatization[tw] OR somatisation[tw] OR hypochondriasis[mesh] OR neurasthenia[mesh] OR conversion disorder[mesh] OR somatoform disorder*[tw] OR hypochondriasis[tw] OR neurasthen*[tw] OR conversion disorder*[tw] OR psychophysiologic disorders[Mesh] OR psychosomatic medicine[Mesh] OR psychophysiological disorder*[tw] OR psychosomat*[tw] OR psychosomatic medicine[tw] OR functional somatic sympt*[tw] OR functional somatic syndrom*[tw] OR

functional syndrom*[tw] OR unexplained sympt*[tw] OR medically unexplained[tw] OR unexplained medical sympt*[tw] OR psychogen*[tw] OR non-organ*[tw] OR non-specific complain*[tw] OR non-specific sympt*[tw] AND (("therapy"[Subheading] OR "therapy"[tw] OR "treatment"[tw] OR "therapeutics"[MeSH Terms] OR "therapeutics"[tw]) OR ("therapeutics"[tw]) OR ("management"[tw]) OR "intervention"[tw] OR interventions[tw] OR ("therapies"[tw]) OR ("therapeutic"[tw]) OR ("treatments"[tw]))