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Medically unexplained symptoms: time to and triggers for diagnosis in primary care consultations

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Abstract

Background

It is currently not known when in the consultation GPs label symptoms as medically unexplained and what triggers this.

Aim

To establish the moment in primary care consultations when a GP labels symptoms as medically unexplained and to explore what triggers them to do so.

Design and setting

This was a qualitative study. Data were collected in the Netherlands in 2015.

Method

GPs' consultations were video-recorded. GPs stated whether the consultation was about medically unexplained symptoms (MUS). The GP was asked to reflect on the video-recorded consultation and to indicate the moment when they labelled symptoms as MUS. Qualitative interviewing and analysis were performed to explore the triggers GPs perceived that caused them to label the symptoms as MUS.

Results

A total of 43 of the 393 video-recorded consultations (11%) were labelled as MUS. The mean time until GPs labelled symptoms as medically unexplained was about 4 minutes for newly presented symptoms and 2 minutes for symptoms for which the patients had already visited the GP before. GPs were triggered to label symptoms as MUS in the consultation by: the way patients presented their symptoms; the symptoms not fitting into a specific pattern; patients attributing the symptoms to a psychosocial context; and a discrepancy between symptom presentation and objective findings.

Conclusion

Most GPs labelled the presented symptoms as medically unexplained soon after the start of the consultation. GPs are triggered to label symptoms as medically unexplained by patients' symptom presentation, symptom patterns, and symptom attribution. This suggests that non-analytical reasoning was a central component in their thought process.

Introduction

Patients with medically unexplained symptoms (MUS) are common in general practice. No underlying disease can be found in approximately 3% to 11% of the symptoms that are presented to the GP.¹⁻³ MUS cover a wide variety of symptoms, such as pain, dizziness, and fatigue,⁴ and are found in a heterogeneous group of patients

A recent meta-synthesis by Johansen et al described challenges faced by GPs when managing patients with MUS.⁵ The research covered GPs' challenges to manage the problems of patients with MUS. GPs' struggle with the incongruence between patients' symptom presentations and the explanatory models for biomedical disease, and the negative experiences of both patients and GPs that can cause difficulties in the doctor-patient relationship.⁵ Furthermore, the negative attitude of many GPs towards patients with MUS⁶ and the lack of effective management strategies in primary care⁷ also contribute to the problem. GPs face difficulties recognising and labelling MUS. Even when there is no indication of a somatic problem, GPs still experience uncertainty and fear missing a serious disease.^{8,9} The concept of MUS is defined in different ways in the literature and the criteria for labelling symptoms as medically unexplained have been subject to various interpretations.^{10,11} Additionally, GPs vary in how they establish whether symptoms are medically unexplained.^{6,12}

GPs indicate that the following factors play a role in diagnosing MUS: knowledge of both the patient's medical context and their social context, the duration of the consultation, the negative emotions that GPs experience during the consultation, the nature of the symptoms, and how the symptoms are presented.^{13,14} These studies describing how GPs diagnose MUS have only looked at this process indirectly in focus group interviews or by analysing transcripts of consultations, and are subject to recall bias; therefore, a more direct approach is needed to study GPs' cognitive processes when making a diagnosis of MUS in detail. Stimulated recall is one such direct approach, in which video-recorded situations are replayed to the subjects to help them identify and unravel their cognitive processes.¹⁵ Furthermore, as far as is known, no previous study has analysed exactly when a GP labels the symptoms as MUS in the consultation. Labelling symptoms as medically unexplained too quickly may increase the risk of missing diseases, but late recognition of MUS may involve the risk of unnecessary referrals, potentially harmful investigations, and inadequate treatment. The combined insight into how and when GPs recognise MUS in the consultation is important, as it can help proper recognition of MUS, may prevent unnecessary diagnostic and treatment procedures, and gives an insight into the GPs' thought processes. It gives GPs the opportunity to employ different engagement and management strategies during their consultations and may lead to better care and outcomes for patients with MUS.¹³ Therefore, this study aims to establish when in the consultation GPs label symptoms as MUS, and explore what elements trigger GPs to label symptoms as MUS.

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How this fits in

It is not currently known when in the consultation GPs label symptoms as medically unexplained and what triggers this. The combined insight into how and when GPs recognise MUS in the consultation is important, as it can help proper recognition of MUS, may prevent unnecessary diagnostic and treatment procedures, and gives an insight into the GPs' thought processes. This study found that the mean time until GPs labelled symptoms as medically unexplained was about 4 minutes for newly presented symptoms and 2 minutes for symptoms for which the patients had visited the GP before. Triggers for diagnosing MUS were knowing the patient as someone with MUS, the way the patient presented their symptoms, symptoms not fitting into a specific medical pattern, the patient attributing the symptoms to the psychosocial context, and discrepancy between symptom presentation and objective findings. This suggests that non-analytical reasoning was a central component in the GPs' thought processes.

Method

A video-stimulated recall study was performed. In the study, GPs were asked to point out the moment when they decided on the diagnosis of MUS and then interviewed about the triggers for labelling the symptoms as MUS in this specific consultation.

Study sample

Video-recorded consultations and verbatim transcripts were collected as described previously.² Data were collected in 20 primary care practices in the region of Nijmegen (the Netherlands) in 2015. All consultations were video-recorded by the participating GPs during 1 or 2 days. If fewer than three MUS consultations could be identified after 1 day of video-recording, a second day was spent video-recording consultations. Immediately after each consultation, the GPs completed a questionnaire and assessed whether they thought the patient presented with MUS. They answered the question 'Do you think this patient has MUS?' on a 3-point scale relating to the presentation of physical symptoms: could not be explained by a recognisable disease (that is, MUS consultation), could partly be explained by a recognisable disease (that is, partial MUS consultation), or could be explained by a recognisable disease (that is, a consultation for medically explained symptoms [MES]).

This scale has face validity as it can easily be understood and applied by GPs during consultation hours, and resembles clinical daily practice in which GPs have to interpret symptoms presented by patients as explained or unexplained by physical pathology. Previous research in this field used the same scale.^{16,17} The researcher selected all consultations from each GP that had been identified by the GP as an MUS consultation. The moment that a GP labelled symptoms as MUS was defined as the moment the GP decided the patient had MUS. The time until the GP labelled the symptoms as medically unexplained in the consultation was defined as the time from the start of the consultation to the exact moment that the GP decided the patient had MUS. If the GP labelled the symptoms as medically unexplained before the start of the consultation rather than in the consultation, this moment was defined as the start of the consultation (time 0:00). Furthermore, GPs indicated whether the presented symptoms were new or recurrent. All of the GPs' consultations that had been identified by the GP in question as an MUS consultation were selected for the present study.

Procedure

GPs were invited to watch the videos of all their MUS consultations and reflect on these during a semi-structured interview performed by one of the researchers. The aim was to do this shortly after the consultation, but this was dependent on the GPs' diaries (median time 44 days, range between 18–122 days). The interviewer informed the GPs that he was interested in communication aspects of the consultation and therefore in any spontaneous reactions and comments that emerged during the viewing. Each time the GP wished to comment, the video was stopped. If the GP did not comment within 3 minutes, the video was stopped and the following question was asked: 'What do you think of the consultation after watching it so far?' After showing the whole video, the following questions were asked: 'Would you like to add something?', 'Have you missed anything?', and 'Is there anything that you would want to change?'

The GPs' difficulties in communication during the MUS consultations were identified and described in another scientific paper.¹⁸ Additionally, after showing the whole video, GPs were asked to point out the moment when they decided on the diagnosis of MUS and together the triggers for labelling the symptoms as MUS in this specific consultation were explored. Furthermore, GPs were contacted 3 months after the consultation and asked whether an underlying somatic disease was found during the follow-up that could explain the symptoms presented during the video-recorded consultation.

Analysis

The audio-recorded interviews (with the GPs' reflections on the video-recorded consultation) were transcribed verbatim. Two researchers independently analysed the transcripts of the GPs to identify the exact moment that the GP labelled the symptoms as MUS. These comments from the transcripts were matched with the video-recorded consultation to measure the time from start of the consultation to the moment of MUS labelling. The start of the consultation was defined as the first identifiable verbal exchange between GP and patient. This was independently defined by the two researchers who discussed each identified moment in a consensus meeting to reach consensus on the exact moment of labelling MUS. Next, the same researchers independently selected the comments in which the GPs indicated why they labelled the symptoms as MUS at that specific moment in the consultation. Disagreements about the selection of text fragments were resolved by discussion and text fragments were studied qualitatively using a thematic analysis. Three researchers read all of the selected comments several times to familiarise themselves with the data. They coded elements that triggered GPs to label symptoms as MUS and identified categories independently of each other. The codes and categories were discussed. During the analysis, the developing categories were constantly matched with the transcripts. New codes emerging in the discussions were applied to the transcripts. The software program Atlas-ti (version 8.4) was used for analysing the data.

Analysis was inductive to ensure that the process was grounded in the data rather than in preconceptions. The analysis of the 20th interview provided no new codes or concepts. Saturation was reached because no new categories were found during this last coding process.

Results

In total, 36 GPs were approached in the broader region of Nijmegen, of whom 20 (56%) agreed to participate. The number of MUS consultations per GP varied between zero and five; only two GPs did not identify any MUS consultations during the study days. The mean age of the remaining 18 GPs who commented on their consultations was 46, nine of the GPs were female, the mean working experience was 15 years, and eight practices were located in an urban area while the other 10 were located in a rural area.

A total of 43 of the 393 video-recorded consultations (11%) on the study days were labelled as having a patient with MUS. In 10 of them, GPs indicated that the symptoms were new and had not

been presented in previous consultations, and in the other 33 consultations the GPs stated that the symptoms had already been presented in previous consultations. Three consultations in which patients presented new symptoms were excluded: two because the GPs were unable to reflect on the consultation and one because of technical errors with the video-recording. Three consultations in which patients presented their symptoms previously were also excluded: in two consultations the GPs indicated that they could not identify the moment they labelled the symptoms as MUS and one was excluded because of technical errors with the videorecording. Therefore, in total, 18 GPs commented on 37 MUS consultations. In seven of these consultations, the GPs said that the symptoms were new and had not been presented in previous consultations, and in the other 30 consultations the GPs said that the symptoms had already been presented in previous consultations.

Time to when symptoms are labelled as MUS

In 20 consultations, GPs decided during the consultation that the patients were presenting with MUS. In only one consultation did the GP decide after the consultation that the patient presented with MUS. In 16 consultations, GPs said that they already thought the patient would present with MUS before the start of the consultation. In cases where GPs indicated that the presented symptoms were new, the mean time until they decided the symptoms were medically unexplained was 4:25 minutes (range 0:00–16:31 minutes, median 1:45 minutes). In cases where GPs indicated that the symptoms had been presented previously, the mean time until they decided that the symptoms were medically unexplained was 1:47 minutes (range 0:00–10:10 minutes, median 0:12 minutes).

Excluding the 16 consultations in which the GPs labelled the symptoms as medically unexplained before the start of the consultation showed that the mean time until GPs decided the symptoms were MUS was 5:09 minutes (range 0:30–16:31 minutes, median 2:27 minutes) for new symptoms ($n = 6$) and 3:35 minutes (range 0:24–10:10 minutes, median 2:12 minutes) for symptoms that had been presented previously ($n = 15$).

Table 1 reports an overview of the time until GPs labelled the symptoms as medically unexplained. Three months after the video-recorded consultations, only one GP stated that one patient who was initially diagnosed with MUS during the videorecorded consultation was diagnosed with an underlying somatic disease in the follow-up that may have explained the presented symptoms previously labelled as MUS.

Triggers for labelling symptoms as MUS

The study distinguished between consultations in which the GPs indicated that they had applied the label MUS already before the start of the consultation and consultations in which the GPs indicated that they decided to apply the label MUS during or after the consultation.

The GPs who indicated that they decided the symptoms were MUS during or after the consultation did so for the following reasons: the way patients presented their symptoms; symptoms not fitting into a specific pattern; the patient attributing the symptoms to the psychosocial context; and the discrepancy between symptom presentation and the objective findings.

The GPs who indicated that they thought the symptoms were MUS already before the start of the consultation said that they did so because they knew the patient and were therefore expecting MUS

Labelling during or after the consultation

The way patients present their symptoms

Some GPs mentioned the way patients presented their symptoms as a trigger for labelling the symptoms as MUS. Examples of this are vague or unstructured presentation of the symptoms and the presentation of many different symptoms:

'She presented with a verbal flood of symptoms, and they weren't very structured either, jumping from one thing to another and shifting from one physical symptom to the next, but not really with any alarming symptoms, and that made me think of MUS.' (GP 16)

Symptoms not fitting into a specific pattern

GPs stated that, if the symptoms did not fit into a specific pattern, this made an MUS label more likely for them. This also included the absence of red flags when going through the history and no abnormal findings in the physical examination or additional investigation. Furthermore, they mentioned the fact that the symptoms had persisted for a long time and the vagueness of symptoms as reasons for labelling the symptom as MUS.

Another reason for labelling symptoms as MUS was a discrepancy between the GP's evaluation and the patient's evaluation of the severity of the symptom or a discrepancy between the GP's ideas and the patient's ideas about treatment plans:

'Right. The pattern wasn't that logical and so on. I can understand you getting out of breath at the top of the stairs, but of course if you also get short of breath regularly when at rest, that's a weird pattern. And then I do often think of hyperventilation, for instance.' (GP 14)

[Table 1]

Patient attributing the symptoms to the psychosocial context

According to GPs, some patients attributed the symptoms to their psychosocial context. As an example, a patient said that the increase in her neurological complaints in the context of multiple sclerosis, which had led to a hospital admission, was caused by stress and anxiety. Another GP labelled the symptoms as MUS because the patient said that the symptoms were caused by stress:

'Well, because he says himself — and that's really the main component — that it must be connected with that stress and that the stress makes it worse.' (GP 6)

Discrepancy between symptom presentation and the clinical picture

Some GPs experienced differences in what the patient told them and what they observed or objectively measured. For them, the symptom presentation did not match with the clinical picture. A GP gave the example of a patient having extreme back pain even though she entered the consultation room without expressing pain:

I: *'What made you think of MUS?'*

[I = Interviewer]

GP 10: *'The presentation and the clinical picture. She came with a headache but I didn't see a sick woman. I heard a woman who sniffed a bit every now and then (although I wasn't sure whether I wasn't sniffing too) and who didn't give the impression of being ill at all, didn't sound like her nose was blocked, wasn't coughing, nothing, didn't appear in pain, so the clinical picture doesn't match the presentation.'*

Labelling before the start of the consultation/knowing the patient

Symptoms presented before

Many GPs stated that they labelled the symptoms as MUS because they expected that the patient would present a specific symptom for which either GPs or specialists already had ruled out somatic

diseases. These symptoms had been presented before. GPs mentioned the knowledge of the patients' medical history, social background, and personal characteristics, such as coping with stress or translation of psychosocial problems into physical symptoms, which triggered them to label the symptom as MUS. This was especially the case when patients had frequently visited them with the same symptoms. Furthermore, GPs said that they were inclined to label a symptom as medically unexplained when patients had a medical history with symptoms previously labelled as MUS:

'That is simply the medical history you have. I've seen her a few times and the first time, well, you get a shock because she really comes across as very neurotic and crazy. And if someone's already been put through the mill to some extent — mainly the internal medicine specialist in her case, by the way — and they find nothing, and things start repeating, then it's all the more likely that it'll still be unexplainable next time. That's just a consideration, you could say.' (GP 1)

Symptoms not presented before

Two GPs labelled the presented symptoms, which had not been presented previously, as being MUS. They felt confident doing so because they knew the medical history and personal characteristics of the patients. One GP said that they labelled the symptoms as medically unexplained because the patient never has a 'concrete story' (that is, a vague presentation of symptoms). The other GP said that the patient always attended the surgery with MUS-like symptoms:

I: 'At what point in the consultation did you think this was MUS and what pointed in that direction?'

GP 3: *'It was when the patient came in. I think he is a real MUS patient because he never has a concrete story. Of course that's not very nice of me and I realise that. You need to push that perception far away from you and approach things with an open mind. But whenever this patient comes in, I always think of MUS.'*

Discussion

Summary

The mean time until GPs labelled symptoms as medically unexplained was about 4 minutes for newly presented symptoms and 2 minutes for symptoms for which the patients had previously visited the GP. Triggers for diagnosing MUS were: knowing the patient as someone with MUS; the way the patient presented their symptoms; symptoms not fitting into a specific medical pattern; the patient attributing the symptoms to the psychosocial context; and discrepancy between symptom presentation and objective findings.

Comparison with existing literature

As far as is known, this is the first study to look at exactly when symptoms are labelled as MUS in the consultation. By using the method of stimulated recall, more insight was gained into the moment in primary care consultations where GPs labelled symptoms as medically unexplained and what triggered them to do so.

In previous research, GPs indicated how they managed patients with MUS in daily practice.¹⁹ The researchers performed five focus groups with GPs and found that the diagnostic process of patients with MUS varied from consultation to consultation, and the patient had usually gone through a series of consultations before the GP labelled the symptoms as being MUS. The difference with the findings might be explained by the fact that this study is a more direct study where GPs were asked to reflect on their own real-life MUS consultation, whereas Hansen et al¹⁹ studied the GPs' view indirectly in a focus group where the results may be more prone to recall and desirability bias.

It was found that GPs labelled symptoms more quickly as medically unexplained when the symptoms had been presented previously, than when symptoms were new. This is not surprising as the GPs' knowledge of the patient's medical history, social background, and personal characteristics play a role in the labelling process, and GPs use this knowledge in the labelling process when there is continuity of care. The median for newly presented symptoms indicates that GPs still spend only a fairly short amount of time excluding potentially serious organic causes of disease. In most cases, GPs labelled these symptoms as medically unexplained because the patient attributed the symptoms to their psychosocial context. Additionally, GPs labelled these symptoms as MUS because they did not fit into a specific pattern, or because of their vague and unstructured presentation. The GPs in the present study clearly indicated what triggered them in the labelling process. Similar to previous research, knowing the medical history, social background, and personal attributes of the patient,¹³ the presentation of vague and multiple symptoms,¹³ and a mismatch between symptom presentation and objective findings¹¹ triggered GPs to label symptoms as medically unexplained. Furthermore, and not reported before in the MUS literature, the present study found that GPs used symptom patterns and symptom attribution as diagnostic instruments.

Kahneman has described two models of knowing and thinking: analytical reasoning, which is controlled and relatively slow, and non-analytical reasoning, which is intuitive and fast.²⁰ As GPs mentioned that contextual knowledge, patients' presentations, and pattern recognition played a role in diagnostic reasoning, this suggests that non-analytical reasoning (that is, clinical reasoning in which GPs do not explicitly test hypotheses) was a central component in their thought process, rather than the analytical reasoning that is dominant in the hypothetico-deduction model, wherein the GP generates hypotheses and tests these hypotheses against the findings.^{21,22}

GPs solve problems using a variety of strategies: they use pattern recognition for simple problems (fast), and systematic generation and testing of hypotheses for difficult problems (slow).²³ Previous research has shown that GPs encapsulate clinical knowledge in concepts and conceptualise illness scripts (causal models based on experiences) for each disease.²⁴ These 'illness scripts' are activated in the conversation with the patient during the consultation²⁵ and enable the GP to swiftly recognise patterns of symptoms. This diagnostic reasoning in which the non-analysing system plays a central role may be sensitive to errors and prejudices. This applies particularly for GPs who labelled symptoms, which had not been presented before, as MUS. Other research^{26,27} found that GPs' prejudices also play a role when applying the label MUS. GPs who employ prejudice as well as patients' symptom presentation, symptom patterns, and symptom attribution as diagnostic instruments are at risk of errors; however, previous research found that the percentage of misdiagnoses in patients with MUS was relatively small.²⁸ This is in line with the present study's findings as only one patient initially labelled with MUS was found who was later diagnosed with an underlying somatic disease. The illness scripts of MUS are often not only about symptom patterns, but may also include high frequency of healthcare use, loss of participation in daily activities, and social isolation as these are positively associated with MUS.^{29,30}

Previous research has described that, in contrast with biomedical disorders, in which GPs use an approach based on biochemistry, psychiatry is dependent on pattern recognition.³¹ GPs are required to use both approaches simultaneously for patients with MUS. Other researchers showed that physicians were able to reliably agree on the recognition of MUS and argued that GPs demonstrate a high level of accuracy in subjectively recognising MUS.³² For this it is helpful being aware of the factors that set up, initiate, and maintain MUS.³³ This is in line with the Dutch GP guideline on MUS, which uses a model that also involves predisposing, precipitating, and perpetuating factors.³⁴

Strengths and limitations

To the authors knowledge, this is the first study of the time to diagnosis with objective measures and minimal recall bias. The data were independently analysed by two researchers. With the qualitative

approach unique to this topic, the study was able to look at the considerations of the GPs during the process of diagnosing MUS in their patients.

A possible limitation could be that the study did not have the opportunity to establish directly when the GP decided that the symptom was unexplained; this was extrapolated from the comments the GP gave during the reflections on the video-recorded consultation. Furthermore, if GPs labelled symptoms as medically unexplained before the start of the consultation, it was not possible to quantify exactly when the GPs labelled the symptoms as MUS. To pinpoint this moment in these cases, it was defined as the start of the consultation.

When selecting patients with MUS in this study, considerable variation between GPs was identified. Some GPs labelled five patients as presenting with MUS during a single day of consultations, whereas others identified none during 2 days of video-taping. This might have to do with uncertainty that some GPs have about labelling symptoms as MUS, the variation in working experience, or the result of a lack of clarity in the definition of MUS. The variation in the selection of MUS might also be accounted for by natural variation. Moreover, some GPs do not interpret symptoms as medically unexplained because they understand the biopsychosocial origin of the patients' symptoms. Probably, these GPs use an effective communication style and know how to manage patients with MUS. Although the framing of MUS is a matter of debate, one might assume that the two GPs without any MUS consultation have a different framework about MUS. This cannot be ruled out, but it is known that most Dutch GPs comply with the Dutch multidisciplinary guideline for MUS, and this guideline for GPs about MUS explicitly explains the definition and framework of MUS.³⁴

Furthermore, the aim was to study those patients presenting with MUS according to their GP, without reference to official definitions of MUS. This is important because, it is to be assumed, that when the concept of MUS enters the mind of the physician, it evokes a certain set of cognitions that influence the physician's behaviour. It was explicitly not the aim to have a shared and predefined understanding of the concept of MUS; however, the variation in the selection of patients with MUS does not affect the study's conclusions. In order to increase validity, the time delay between event and recall was minimised as much as possible. Key to this validity issue is the need to ensure that the questions/prompts did not alter the cognitive process being employed at the time of the event.³⁵

Although some GPs reflected on their consultation only after a considerable amount of time, it is to be assumed that the questions did not alter the cognitive process used at the time of the reflection, and did not influence the validity of the results, since the GPs were questioned while viewing the consultation. GPs recognised their own MUS consultations very well. This is reflected in the GPs' remarks, as almost all of the GPs were able to point out the exact moment when they believed the patient presented with MUS. Of course, it cannot be excluded entirely that the GPs had changed their mind, but this was minimised by confronting them with the actual setting. Future studies could look more specifically into the relationship between spontaneous and delayed recall sessions. Additionally, it cannot be conclusively concluded that GPs are capable of recognising MUS in patients as not enough is known about the false negatives (patients' complaints labelled as medically explained that should be labelled as MUS).

Finally, GPs indicated in only seven MUS consultations that the symptoms had not been presented previously, which is quite a small number. Moreover, there was a large variation in the timing of labelling new symptoms as MUS. Caution is therefore to be used when interpreting the results and the findings should not be generalised.

Implications for practice

This study has shown when and how GPs labelled symptoms as medically unexplained. Furthermore, more insight has been gained into GPs' diagnostic reasoning in MUS consultations. Triggers for

diagnosing MUS were: knowing the patient as someone with MUS; symptom presentation; symptom patterns; and symptom attribution. To be able to use the above distinctions, the GP should:

- work in an environment where continuity of care is possible, resulting in knowing the medical history, personal characteristics, and social background of the patient;
- actively question the patient about their ideas, concerns, and expectations (ICE);
- be able to recognise patterns of symptoms that cannot be attributed to a disease; knowledge and experience about how disease will manifest may help GPs to recognise these patterns of symptoms; and
- recognise that a vague presentation of symptoms may indicate MUS.

Although uncertainty in general practice is a 'routine inevitability',³⁶ this study found that GPs labelled symptoms as medically unexplained before or soon after the start of the consultation, and they clearly pointed out what triggered them in their labelling process. This suggests that the participating GPs did not experience uncertainty about missing a diagnosis.

The uncertainty in MUS consultations is caused not so much by the diagnostic process, but by difficulties around managing problems of patients with MUS. Probably, in their diagnostic reasoning concerning MUS, GPs use the fast, non-analytical system instead of the slow system that demands more effort.²⁰ Diagnostic reasoning in which the fast, non-analytical system plays a central role seems to be justified and moderately safe in MUS consultations as the percentage of misdiagnoses is small.²⁸ However, GPs should be aware that the non-analytical system may be sensitive to errors and prejudices, thereby overlooking medically explained symptoms.³⁷⁻⁴²

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Ethical approval

The research ethics committee of the Radboud University Medical Center concluded that the study complied with the applicable rules in the Netherlands (file number: 2015-1566). This meant that the authors took care that the GPs and the patients could not be identified through the details of the stories. Written informed consent was obtained from all participants, who were able to withdraw their consent at any time.

Provenance

Freely submitted; externally peer reviewed.

Competing interests

The authors have declared no competing interests.

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Table 1: Time until GPs labelled the symptoms as medically unexplained

		Consultations, <i>n</i>	Mean, minutes	Range, minutes	Median, minutes	Interquartile range, minutes
Symptoms labelled as MUS before, during, or after the consultation	New symptoms	7	4:25	0:00-16:31	1:45	0:30-7:44
	Symptoms presented previously	30	1:47	0:00-10:10	0:12	0:00-2:16
Symptoms labelled as MUS during or after the consultation	New symptoms	6	5:09	0:30-16:31	2:27	1:06-9:56
	Symptoms presented previously	15	3:35	0:24-10:10	2:12	0:55-6:36

MUS = medically unexplained symptom.