THE CAREFUL ASSESSMENT TOOL FOR MANAGING PATIENTS WITH MEDICALLY UNEXPLAINED SYMPTOMS - THE EXPERIENCE OF SLOVENIAN FAMILY MEDICINE TRAINEES: A QUALITATIVE STUDY

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ABSTRACT

Keywords: medically unexplained symptoms, Careful Assessment tool, family medicine, qualitative studies, family medicine trainees

Introduction: Primary care physicians use various tools and methods to identify medically unexplained symptoms (MUS). The main purpose of our study is to determine the views of Slovenian family medicine trainees (FMT) about using the “Careful Assessment” tool for managing patients with MUS.

Methods: A qualitative study using open survey questions focused on the experience of family medicine trainees in managing patients with MUS. The sample consisted of surveys from 184 family medicine trainees. These trainees analysed a total of 702 patients with MUS. Manual coding was used for quantitative content analysis.

Results: In the coding process, 49 codes were developed that included broader research fields about using the “Careful Assessment” tool for managing patients with MUS. The codes were grouped into four theoretically grounded, logical categories in accordance with the elaborated theoretical concept: multi-purpose utility; improved patient management; in-depth knowledge and new skills; and patient response.

Conclusion: The study demonstrated that, in the view of Slovenian FMT, the “Careful Assessment” tool has multi-purpose utility. The study showed that FMT felt that this tool helps them in systematic patient management. Their opinion is that it helps them establish a trusting relationship with patients, which is a precondition for providing further treatment.

IZVLEČEK

Ključne besede: medicinsko nepojasnjena stanja, orodje skrbna ocena, družinska medicina, kvalitativne raziskave, specializanti

Uvod: Zdravniki primarnega zdravstvenega varstva uporabljajo različna orodja in metode za prepoznavanje medicinsko nepojasnjeni simptomov (MNS). Glavni namen naše študije je ugotoviti stališča in prepričanja slovenskih specializantov družinske medicine (SDM) o uporabi orodja skrbna ocena za zdravljenje bolnikov z MNS.

Metode: Analizirali smo domače naloge 184 specializantov družinske medicine iz sedmih modularnih skupin (skupine 17–23), ki so v okviru izobraževalnega modula medicinsko nepojasnjena stanja (del obveznega izobraževanja v okviru specializacije družinske medicine), od leta 2016 do 2018, skupaj analizirali 702 bolnika z MNS. Specializanti družinske medicine, ki so sodelovali v študiji, prihajajo iz različnih regij Slovenije, torej smo oblikovali čim širši vzorec. Kvalitativna študija z odprtimi anketnimi vprašanjami se je osredotočila na izkušnje SDM pri zdravljenju bolnikov z MNS. Pri metodi kvalitativne analize sestavili smo uporabiti ročno kodiranje, s pomočjo katerega smo razčlenili odgovore anketirancev, oblikovali kode in jih potem združili v kategorije (kode višjega ranga), ki jih je možno logično povezati in metodološko opisati.

Rezultati: V procesu kodiranja je bilo ugotovljenih 49 kod, ki so vključevale širša raziskovalna področja o uporabi orodja skrbna ocena za obravnavo bolnikov z MNS. Rezultat kodiranja so štiri oblikovane kategorije: večnamenska uporabnost; boljša obravnava bolnika; poglabljeno znanje in nove veščine; odtiv bolnikov. Kot nove veščine, ki so jih pridobili s pomočjo uporabe orodja skrbna ocena pri obravnavi bolnikov z MNS, SDM izpostavljajo predvsem: poslušanje bolnika; večino umesčanja simptomov in znakov v biopsihosocialni model; komunikacijske veščine; veščino vpogleda v zgodovino bolnika; prepoznavanje psihosocialnega okolja in socialnih problemov bolnika; veščino hitrejšega in boljšega vpogleda v družinsko anamnezijo.

Zaključek: Naše raziskava je pokazala, da je po mnenju slovenskih SDM orodje skrbna ocena večnamensko koristno za uporabo pri obravnavi bolnikov z MNS. Slovenski SDM menijo, da jim orodje pomaga pri sistematičnem vodenju bolnikov z MNS ter da jim pomaga vzpostaviti zaupljiv in poglabljen odnos z bolnik, kar predstavlja osnovo za kakovostno vodenje in zdravljenje.
1 INTRODUCTION

Medically unexplained symptoms (MUS) - physical symptoms that cannot entirely be accounted for by a known somatic disease - are extremely common in primary care (1, 2). MUS and methods to identify them thus constitute an important topic in primary health care (1). The authors of studies from multiple countries agree that almost a third of symptoms remain unexplained when managing primary care patients (2, 3). Primary care physicians often face the challenge of how to identify MUS, and numerous scientific studies deal with methods and evaluation models aimed at identifying MUS in order to help physicians manage such patients (4, 5).

Physicians use various diagnostic tools and methods to deal with MUS patients, and simultaneously try to assess the usefulness of these tools and methods, which mostly include standardised questionnaires (4, 7-9), comprehensive psychological theories and approaches (10-12) and qualitative data collection techniques such as interview or focus groups (7, 13-17). Using this data, several studies aim to standardise the MUS identification procedure in primary care patients, with some authors going as far as trying to provide a paradigmatic, holistic framework for managing patients with MUS (18).

A successful, and notably early identification of patients with MUS is essential both for primary care patients and physicians. Therefore, it is important to develop a holistic approach based both on the information from the patients with MUS and the information (views and experience) provided by primary care physicians. Empirical studies support the assumption that using comprehensive models provides an incremental database (and meta database) useful for predicting future situations and providing better insight into the situation of the entire population of patients with MUS (4, 18).

The study assumes that tools such as the “Careful Assessment” tool (Table 1), based on the “P-P-P model” (predisposing factors, precipitating factors and perpetuating factors) (18), allow family medicine trainees (FMT) to better manage patients with MUS, which is reflected in standardised procedures, systematic medical history taking and an inclusive approach in which the patient is actively involved in the medical history collection and treatment of MUS (19, 20).

The main purpose of our study is to determine the views of Slovenian FMT about using the “Careful Assessment” tool (during the MUS module as part of their specialisation program) for managing patients with MUS.

2 METHODS

2.1 Study design

This was a qualitative study. We used semi-structured coursework surveys, done by Slovenian FMT, during their MUS module (part of their specialisation program).

Such a qualitative study means research determining the selection, collection, and analysis of data during the research process (21-23). The collected material was processed using qualitative content analysis (22, 24).

2.2 Participants

Coursework surveys done by 184 Slovenian FMT from seven module groups (groups 17-23) were analysed. These trainees examined a total of 702 patients with MUS.

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Table 1. “Careful Assessment” tool, based on the “P-P-P model” (18).

| CAREFUL ASSESSMENT OF THE SITUATION (active listening as part of the careful assessment): |
|---------------------------------------------------------------|
| THERAPEUTIC EFFECT: -> possible change in patient beliefs -> better understanding of the patient’s own condition (e.g. pain, fears). |
| THERAPEUTIC GOAL: decreasing the power of predisposing factors, limiting precipitating factors, controlling perpetuating factors |

| PREDISPOSING FACTORS |
|----------------------|
| chronic childhood medical illnesses |
| childhood maltreatment |
| low resilience - childhood deprivation |
| low social support |

| PRECIPITATING FACTORS |
|-----------------------|
| psychiatric disorders (depression, anxiety, panic... ) |
| social, financial, or occupational stress |
| changes in social support |
| change in routine |

| PERPETUATING FACTORS |
|----------------------|
| decreased physical activity |
| weight gain |
| social isolation |
| decreased self-confidence |
between 2016 and 2018 within the MUS training module (part of the mandatory training within the family medicine specialisation). All of the 184 FMT completed their coursework, partly or in total, and responded to closed- and open-type questions in the “Feedback on Careful Assessment Use” questionnaire. The open part of the questionnaire was composed of five essay-type questions answered by the respondents in writing (Table 2).

The content and program contained in the assignments for family medicine trainees were approved by the holder of the modular part of the specialisation, the Department of Family Medicine, Faculty of Medicine, University of Ljubljana.

FMT who took part in the study came from different regions of Slovenia (Table 3), which allowed us to obtain a broad sample.

2.3 Data collection

During the MUS module, FMT become familiar with the problem of identifying and recognising MUS patients, and among other skills master the practical use of the “Careful Assessment” tool for identifying and treating MUS in family medicine practice. Their assignment was to find 3 to 5 patients with MUS and to use the “Careful assessment” tool and test the newly acquired knowledge and skills in practice. The patients were identified based on the inclusion criterion for identifying patients with MNS presented in the module (Patient Health Questionnaire (PHQ-15) value ≥15 points and an additional three criteria: that the symptom is present for at least three months, that the symptom causes clinically significant problems and that symptoms cannot be explained by a known physical illness).

2.4 Data analysis

Manual coding (25) was used for qualitative content analysis. The respondents’ answers were analysed in accordance with the research questions, and codes were prepared and subsequently combined into categories (higher-level codes) that could be logically linked and methodically described. Coding was performed by two independent coders (V.I. and A.M.). When they failed to reach agreement on the coded text, an intercoder agreement was attempted on the differently perceived parts of the analysed text in order to match the created category (also known as the unitising process) (26).

3 RESULTS

In the coding process, 49 codes were developed that included broader research fields about using the “Careful Assessment” tool for managing patients with MUS. The codes were grouped into four theoretically grounded, logical categories in accordance with the elaborated theoretical concept (21-24): multi-purpose utility; improved patient management; in-depth knowledge and new skills; and patient response. These are discussed in more detail below.

Table 2. “Feedback on Careful Assessment Use” questionnaire.

| 1. Did you gain anything in this clinical case (you as a young professional) using the Careful Assessment tool? Please describe it: |
| --- |
| 2. Did you learn anything from using the Careful Assessment tool in this clinical case? If YES, what? Please describe it: If NO, how do you explain this? Why not? Please describe it: |
| 3. How useful was the “Careful Assessment” tool in this clinical case? |
| 4. How did the patient respond to your treatment in this clinical case? |
| 5. Do you estimate that you have improved the treatment of your patient in this clinical case? If YES, please describe it: If NO, how do you explain this? Why not? Please describe it: |

Table 3. Participant information.

| Gender | Number of GPs (N=184) | Percentage (%) |
| --- | --- | --- |
| Male | 55 | 29.8 |
| Female | 112 | 60.9 |
| No data | 17 | 9.3 |
| Infirmary location |  |  |
| City | 49 | 26.6 |
| Town | 74 | 40.2 |
| Countryside | 31 | 16.8 |
| No data | 30 | 16.4 |
| Employment |  |  |
| Public institution | 140 | 76.0 |
| Private institution | 3 | 1.6 |
| Concession | 33 | 17.9 |
| No data | 8 | 4.5 |
| Years of service in family medicine |  |  |
| Maximum | 8 |  |
| Minimum | 2 |  |
| Average | 3.3 |  |
3.1 Category 1: Multi-purpose utility
In terms of its multi-purpose utility, the “Careful Assessment” tool was seen by the FMT as very useful for managing patients. The tool allowed them to manage the patients systematically and to gain the patients’ trust, as well as to obtain a general understanding of the patients’ histories. Below are some of their statements.

“I believe the tool was very useful. At the beginning, I felt a bit lost because I was overwhelmed by his (the patient’s) problems and medical reports. I often felt that my management was not appropriate, since I was unable to find the main problem. I improved this by using the tool.” (GP 35).

“Very useful. It helped me establish a more trusting relationship with the patient, who then opened up and we were able to slowly reach the triggers of the problems. We needed four months of consultations and the tool enabled us to finally succeed in approaching certain topics.” (GP 5).

The FMT also evaluated the experience of patients favourably, who saw the use of the “Careful Assessment” tool as positive, indicating its general usefulness both for the physician and the patient. The systematic management was considered by the FMT to be the most valuable contribution.

However, certain concerns raised by some FMT pointed to the fact that the “Careful Assessment” tool was useful for the physician, but not so much for the patients, who did not identify the potential cause of their problems during such treatment. Below are two different experiences from respondents.

“For me, “Careful Assessment” meant a structure that facilitated my in-depth dialogue with the patient. It led me to review the patient’s medical records from her childhood, to investigate her susceptibility and to reflect on and ask about the triggers and the patient’s response to them.” (GP 12).

“It was mostly useful for me in terms of understanding the patient’s feelings and problems. The tool was less useful for the patient’s better understanding of their own condition.” (GP 40).

3.2 Category 2: Better patient management
The FMT specifically mentioned some elements of the “Careful Assessment” tool as being useful for better patient management. These included notably enhancing the physician-patient relationship, which is often called into question due to certain systemic problems in the health care system (e.g., overburdening of family physicians). Another useful element was the time available for consultations by means of the “Careful Assessment” tool.

“I was able to deal with the patient comprehensively, like all patients should be if we had the time.” (GP 55)

“In this case, I asked the patient in more detail about her current life situation and its impact on her thinking and experience. I usually do not ask this because normally I do not have the time for an in-depth medical history.” (P35)

Many respondents pointed out that they had succeeded in convincing patients with MUS to start taking better care of themselves and to change certain lifestyle practices, which contributed to the resolution of problems which had been the reason for seeing the physician.

“In this clinical case, the patient’s clinical condition definitively improved, as she started to gain weight, she was feeling better and obtained at least a partial insight into her disease.” (GP 78)

“I believe I improved patient management in this clinical case. There are changes visible, since he started doing something he likes. He feels better on a vegan diet.” (GP 90)

3.3 Category 3: In-depth knowledge and new skills
In the opinion of the FMT, the tool proved to be generally useful for the physician to find out if the patient’s problems were associated with their psychosocial environment and mental health. Such patients most frequently present as ill, and the “Careful Assessment” tool allowed the physician to find various cognitive or psychological disorders and problems behind the patient’s physical symptoms.

“When concrete problems are manifested, the characteristics and psychological status of the patient coming to the physician’s office with the symptoms of a physical illness should be investigated.” (GP 2).

“I learned that it is highly important to understand the background, since problems also arise from the mental state.” (GP 134)

“I learned that all factors pertaining to MUS should be considered. In this case, triggers (depression, interpersonal relationships) are at the forefront.” (GP 77)

Among the new skills obtained through using the “Careful Assessment” tool for managing patients with MUS, FMT particularly stressed the following: listening to the patient; identifying symptoms and signs within the biopsychosocial model; communication skills; the ability to gain insight into the patient’s history; recognising the psychosocial environment and the patient’s social problems; and the ability to have a faster and better insight into family history. FMT usually focus on the patient’s psychophysical symptoms and often fully neglect the importance of the social environment or so-called external factors. Below are two concrete examples from this category.
“I learned that the patient’s condition and problems should be positioned into a wider context of their life and activities action, i.e., their working and living environment.” (GP 6)

“The tool really contributed to explaining the patient’s symptoms, and this module and the Careful Assessment tool made me see the bigger picture around the patient.” (GP 16)

3.4 Category 4: Patients’ response

FMT are convinced that the tool was also seen positively by the patients. The results showed that this sometimes happens during the first consultation, and sometimes later in the process when the patient and physician have built mutual trust and continue on the common path to seek solutions to the patient’s problems. Two examples of this are shown below.

“During the first consultation, the patient was upset, but came back in 10 days saying that she had reflected on her problems and started to see them from a different perspective. She acknowledged that she had many problems in her personal life that she was unable to resolve by herself.” (GP 1)

“First, the patient was surprised by the detailed questions and because new personal topics were discussed; then she opened up and explained her situation in a trusting manner.” (GP 17)

“At first, he would not hear a thing about psychological problems; he was convinced that his problems were physical in nature. Later on, he agreed to reflect on whether the cause of the problems was the family situation, he also agreed to see a psychiatrist.” (GP 19)

“The patient was highly satisfied with the consultation; when we cleared up the issue, she seemed more relaxed and came more rarely to the physician’s office and in a better mood.” (GP 88)

In some cases, the patients had reservations regarding the “Careful Assessment” tool. The FMT highlighted the patients’ lack of trust because they were used to their chosen physician (the trainee’s mentor), which resulted in denial, lack of cooperation and resentment.

“Negative response. She is convinced she is very ill and that activities she could do by herself are just a waste of time.” (GP 54)

“The patient responded very negatively, she refused to discuss her gradual work activation or professional rehabilitation.” (GP 44)

“Negative response; he had distanced himself from his psychological issues as the cause of his problems.” (GP 110)

Finally, both types of experience, positive and negative, can be important in the process of improving FMT education and better management of patients with MUS.

4 DISCUSSION

The first finding is that the “Careful Assessment” tool, when used by Slovenian FMT, was aimed at achieving more systematic management of patients with MUS. Physicians are able to obtain more information from the patients, thus gaining more insight into their family history and characteristics of their social environment, which is a frequent source of a patient’s problems. In his study, Stone (18) found that a key problem is the fact that physicians often simply copy strategies from others, and mostly manage patients with MUS based on their own experience. He suggests the creation of a comprehensive model according to which a bigger emphasis should be placed on the cognitive and emotional side of the patient’s problems when taking a medical history.

Our second finding is that, in the view of Slovenian FMT, the “Careful Assessment” tool is useful in improving trust and an encouraging an honest and open physician-patient relationship, which is needed when treating patients with MUS. Other authors in their studies on the subject made a similar finding (2-3, 5-9, 11-13, 27-29).

Since MUS are often associated with psychological problems, which are frequently difficult for people to discuss, trust is essential for successful treatment. This is also shown by the results of our research, which are similar to the results of some studies from abroad. For example, Den Boeft et al. (4) found that the physician’s skills, understanding the patient’s context of the broader environment (work, social and family environment) and the physician-patient relationship all affect the management of patients with MUS. The authors stress the importance of systematic patient data collection.

An interesting model for assessing long-lasting symptoms in patients with MUS was provided by Tyrer et al. (12), who used 470 patients to assess long-lasting symptoms in the patients, their characteristics and internal consistency. The study did not involve physicians (unlike our research) and was only focused on patients, which means that the experiences and opinions from physicians in managing patients with MUS were not covered.

A mixed-methods approach was used by Rask et al. (6), who used a combination of quantitative and qualitative data to characterise the clinical usefulness of a special diagnostic category called ‘multiple symptoms’ to identify the intensity of MUS diagnosis in the patients. Similar to our study, Rask et al. (6) concluded that trust and understanding the patient’s social environment were necessary for effective management of patients with MUS,
and that models or tools able to assist physicians to take high-quality medical histories and determine treatment are also important.

Similar to other studies (5-9, 11-13), ours showed that the standardisation of procedures and increasing systematicity in taking medical histories as well as an inclusive approach actively involving the patient are essential for successful management and treatment of patients with MUS. Moreover, the study showed that, in the view of Slovenian FMT, such an approach is also supported by patients, who want to establish an in-depth relationship with their physician and be more involved in the diagnostic and treatment process.

4.1 Strengths and limitations

In our study we analysed the collected data using quantitative content analysis. The advantage of such a research approach is a detailed insight into the experience of FMT in managing patients with MUS and the use of the “Careful Assessment” tool. The study constitutes the basis for future research in the learning process framework for managing patients with MUS. The findings from the study are also well-suited for improving clinical practice and conducting future studies.

The study itself has some methodological limitations. First, it was a non-random sample of 184 respondents not representative of the physician population in Slovenia. If the findings are to be generalised to all primary care physicians, a larger random sample should be included, in accordance with a pre-set sampling frame. Moreover, in such a case, a survey method would be better.

The study is also limited by the method used. It was assumed that individuals were honest (and objective) when providing their answers, which is not always true. Respondents often provide conformist answers, and it should be noted that they were not paid to participate in the study. A study bias is also often a problem when issues related to people’s health are concerned, which is particularly typical of patients with an MUS diagnosis. It should also be noted that work in primary health care, which normally follows prescribed guidelines, can significantly vary between different organisations. There are also some systemic factors (lack of physicians, overwhelming workloads in some health care sectors, etc.) and differing workloads in different regions in Slovenia, which could significantly affect the validity of the results obtained. Such limitations should be taken into account by future studies.

5 CONCLUSION

Our study showed that the “Careful Assessment” tool helps FMT in systematic patient management. It helps them establish a trusting relationship with their patients, which is a precondition for providing further treatment. Another important finding is that, according to the responding FMT, patients have a positive attitude to the use of the tool, and feel more involved with regard to their physician and their disease. They are thus willing to give their physician highly intimate details of their problems and go as far as talking about their social environment (job, family), which is often the source of their MUS and other issues in life.

Our results are valuable in terms of future investigations of the treatment of patients with MUS and of the usability of the “Careful Assessment” tool. Since cases of MUS are a very broad, unexplored and unpredictable field of medicine, it makes sense to focus future studies on individual segments of a patient’s treatment, given the problems they face. In this way, future “Careful Assessment” tools would become more accurate and even more useful, contributing to both physicians and the scientific community.

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CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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ETHICAL APPROVAL

The study was approved by the National Medical Ethics Committee of the Republic of Slovenia, Decision No. 0120-587/2020/3 dated 3 Feb 2021. Informed consent was obtained from all family medicine trainees as well as assurances of confidentiality.
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