

RESEARCH

Patients' perspectives on methods of assessing pain

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Abstract

Pain questionnaires often serve as an assessment tool for initial consultations in chronic pain clinics. The Pain Management Unit (PMU) is a tertiary care centre in Halifax, Nova Scotia. A number of clinicians in the PMU have noted that some patients express that questionnaires are time consuming to complete and believe they are not used in a manner that is helpful to their health care. The effectiveness of questionnaire-based pain evaluation is an area of active research. Text-heavy questionnaires have been criticized for their reliance on literacy and for the format's inability to facilitate patient self-expression. Other methods of assessing pain have been suggested, including those that use pictograms, photographs and technology. This study was designed to gauge patients' opinions on the current pain assessment method used in the PMU. In addition, it aimed to evaluate if incorporating art and technology appealed to current patients. The ultimate goal of this study was to evaluate if improvements could be made to patients' pain assessment experience. Thirty patients were interviewed following their initial consultation appointments at the PMU. Interviews were transcribed verbatim and analyzed using NVivo Software to look for themes expressed by research participants. The study yielded a total of 20 different themes, such as repetition within the questionnaires, and the patient's desire to incorporate different technologies such as an iPad or computer. Recommendations are proposed based on these themes to help guide the creation or modification of pain assessment tools.

Introduction

Questionnaires are commonly used by physicians during consultations with patients with chronic pain. Originally developed in 1975, the McGill pain questionnaire (MPQ), is an example of such a questionnaire and is still used widely across Canada¹. The Pain Management Unit (PMU) at the Queen Elizabeth II (QEII) Health Sciences Centre uses a similar form prior to initial consultations. This five-page assessment includes the following sections:

1. Demographic information: includes details of their living arrangements, education, employment, insurance and compensation.
2. Brief Pain Inventory, Short Form: includes a body template where patients may identify locations where they experience pain.
3. Short Form – 12 (Version 2): includes a Quality of Life survey.
4. Profile of Moods State: includes terms that patients may select to describe their feelings and the extent of those feelings in regard to their pain.

The concept for this study was derived from PMU clinician experiences. Physicians noted that patients frequently expressed that the questionnaire was frustrating, time consuming, and felt it was not used in a manner helpful to their healthcare. This study was designed to gain greater insight into how this part of pain assessment could become more patient-centered. Ultimately, the goal of the current research is to use these perspectives to inform the development of an assessment tool that is more acceptable to patients and better conveys their pain experiences.

Methods

The study was conducted at the PMU at the QEII Health Sciences Centre, a tertiary health care institution in Halifax, Nova Scotia. Patients with all types of chronic pain are seen in the PMU. Inclusion criteria were patients with chronic pain who were at least 18 years of age. Exclusion criteria were patients with psychiatric or medical conditions that precluded them from being able to provide an interview.

Members of the PMU health care team approached patients attending the PMU for their initial consultation to determine if they were interested in participating in the study. If interested, a research assistant obtained informed consent from each patient. The patient completed the usual pain assessment forms as per the clinic's usual practice and proceeded with their appointment as per the usual standard of care.

A qualitative approach was taken to address research participants' opinions on the pain assessment tool with the use of semi-structured interviews held with research participants after their clinic appointment. The interview discussion questions were posed in a general and non-directive manner to elicit patients' thoughts in their own words. There were some probing questions used to further explore initial answers. The questions were intended to assess patients' thoughts on the methods of pain assessment that were used, such as their ease of completion, ability to accurately assess their pain, and ability to facilitate conversations with the health care team. Patients were asked specifically for their opinion on incorporating the use of technology with pain assessment (such as using a tablet or computer), the use of art to aid their expression of pain, and the use of a body template.

Upon patient consent, interviews were recorded using an audio recorder so they could be transcribed verbatim. If patients did not consent to audio recording, notes were taken during the interview process. Patient recruitment and data analysis were performed until data saturation was reached.

NVivo software was used to analyze patient interviews. Transcripts were reviewed and independently coded into themes by the principal investigator and the research assistant. Following coding, a finalized list of themes was formed by both researchers.

Results

A total of 30 research participants were interviewed. Analysis of interview transcripts revealed 20 themes (Table 1).

Patients provided differing opinions regarding the use of technological devices to complete pain assessment questionnaires. For example, some patients preferred the use of a tablet:

“Yeah iPads are awesome. They're a lot easier,

personally I don't like pens. They cramp my hands up because I can't use my hands, because they hurt. But I can tap on things a lot easier than using a pen.”

Other patients, however, preferred the traditional way of completing questionnaires:

“I don't know, I'm kind of old-school, I like paper. But I can appreciate the use of technology, it would be so much easier, right, to be able to swipe through or, and have it added to your file or whatever, however it goes. So, I can appreciate that but I like pen and paper.”

Patients provided opinions regarding the length of the questionnaire. For example, some patients thought the length was reasonable and provided good care:

“I've filled out a lot of questionnaires and documents. I don't think it's no longer or shorter than any of the other documents. Maybe it's a little more longer on the specifics because they're trying to get more details for the pain management first and then filling out some more medical information, they're trying to get more from the patient with the documents to try to find out what actually is the pain.”

Other patients, however, found the questionnaire excessively long:

“It would make it a lot easier for people if they were condensed.”

Patients provided opinions regarding the repetitiveness of the questionnaire. For example, some patients thought the questionnaire had overly similar questions:

“Yeah, you've got just too many things that are kind of the same, like it's just another way of saying the same thing.”

Patients provided opinions regarding the body template of the questionnaire (an illustration of a body on which they are able to mark where they feel pain). For example, some patients thought the body template was helpful and could be improved to convey more information:

“That would be really, I think that would be much better than what this is, it's fairly, you know you just kind of scribbling on it where the pain is, but that's a great idea, and especially with like you say, pin points of colour, different colours where you know, if you've got pain all down, you know from let's say your waist down to ankle, it is worse in different spots, and it's more intense in different spots than it is in others. I think that'd be a great idea.”

Patients provided opinions regarding the questions

Table 1. Patient pain assessment themes.

Node	% of Patients that referenced these themes during interview
Favoured the use of a technological version of the body template	80
Assessment tool was of appropriate length	57
Preferred not to use art	57
Favoured the use of technology	43
Preferred not to use technology	40
Questionnaires were thorough	40
Questionnaires contained repetitive questions	40
Favoured the use of art	37
Questionnaires were straightforward to complete	33
Mental health questions were important	30
Questionnaires were too lengthy	27
Questionnaires contained confusing terms	20
Scale-type questions were disliked	20
Questionnaires were not thorough enough	20
Preference for free text	17
Questions not related to the patient	17
Dislike of profile of mood state	13
Impression that questionnaires were designed to “trick” patients	13
Dislike of demographic questions	10
Preferred not to use technological version of body template	10

related to mental health included in the questionnaire. For example, some patients thought these questions addressed important subject matter:

"...looking at the whole person I think is really important, when I was asked about my mood and you know, and here when it talks about you know your quality of life, your sleep, because it does affect those areas of your life."

Patients provided opinions regarding perceived deception in the questionnaire. For example, some patients thought the similarity of questions was designed to catch them being inconsistent in their reporting of their pain:

"...but it seems like okay they're trying to catch you to see if you're paying attention or if you're, you know making it up I guess, so there's a few questions where it's like okay are they trying to catch me on this, like no I already answered this a couple questions ago..."

Patients were asked for their opinions on specific possible modifications. This included their thoughts on incorporating technology (with 43% favouring and 40% preferring not to use), incorporating art (37% favouring and 57% preferring not to use), and the use of a technological version of a body template (80% favouring and 10% preferring not to use).

Discussion

This study was designed to collect patient perspectives on a typical pain assessment used in clinical practice, as well as on possible future modifications that may better meet the needs of patients and better serve physicians in collecting information.

The effectiveness of current methods of pain assessment using multi-page, text-heavy questionnaires has been recognized as less than ideal for a number of reasons. First, patients may lack the literary capabilities to appropriately complete questionnaires². Second, a language-reliant form may not facilitate patient self-expression or conversation with physicians^{3, 4}. Third, a questionnaire format may not accurately convey the subjective experience of pain to physicians³.

Various novel methods of assessing pain have been suggested, including those that use pictograms², drawing^{5,6,7}, and photographs^{3,4}. Pictograms were studied with university students to determine if participants were able to accurately interpret the pictogram's meaning, thus making it a useful tool for symbolizing types of pain². In several other studies, drawings were used to help children symbolize features of pain and progression over time^{6,7}. The drawings were analyzed and a diagnosis was formed and compared to a clinical diagnosis, which revealed accuracy and

usefulness of the drawings^{6,7}. Another study had patients select photographs that they believed represented their experience with pain to present to a physician during initial consult, which facilitated understanding and discussion around pain, and influenced patient-physician interactions^{3,4}.

The results of the current study show that there are differing opinions among this patient cohort on how to best assess pain. Themes included contradicting interpretations from patients, such as 'Questionnaires were straightforward to complete' versus 'Questionnaires contained confusing terms', or 'Questionnaires were too lengthy' versus 'Assessment tool was of appropriate length'.

There was consistency of opinion in some areas of pain assessment. First, in regard to the length, the pain assessment being regarded as too lengthy was only cited as an issue by 8 participants (27%), whereas 17 participants (57%) made statements describing the length as acceptable. Many patients remarked that the questionnaire's length allowed it to be thorough, with 40% of patients describing the questionnaire as a thorough assessment. Second, patients reported feeling as though the questionnaire was designed 'to trick them' (13%). As is written in the book *Chronic Pain*: "nothing erodes trust in the physician faster than the patient feeling 'tricked'"⁸. It is well-recognized that patients with chronic pain experience stigmatization in their daily lives from friends, family, the workplace, and healthcare professionals⁹. They believe practitioners think their pain is exaggerated or imagined and they feel "blamed, misled, and even report being dismissed by health care providers"⁹. Participants explained that the impression of deception was based on the similarity of questions, and the belief that physicians would be checking how consistent patients were in their responses. Since repetition of similar questions caused suspicion and 40% of patients reported the questions as repetitive, it would be reasonable to explore options to reduce the number of similar questions. Third, there was a positive reaction to the idea of completing the body template drawing on an iPad. It was explained that using this modality, patients would have the ability to zoom in/out and colour could be used more easily. Many patients enjoyed the idea of using colours and offered explanations on how this would allow them to better express their pain. These results are consistent with studies that use body templates for self-expression of pain. For example, one study used a body template as a base on which patients could draw to express their experience of pain⁵, with results showing that this method was effective in communicating physical and emotional pain⁵.

A limitation of the current study is that it was

conducted at a single centre. Though this site is the only major pain management unit in Nova Scotia, we recognize that it is likely that individuals from more rural areas of the province may be underrepresented due to the difficulty of traveling for treatment. Additionally, the fact that some patients declined to participate in the study may have resulted in an inherently biased study sample.

Conclusion

There was a wide breadth of responses provided by research participants, yet options for improvement to the current method of pain assessment have been identified. Based on the results of this study, it is recommended that pain assessment tools include a technological body template on an iPad with the option to use colour. It is also recommended that the assessment be revised to include fewer repetitive questions so as to better suit patients' preferences and reduce the sense of the healthcare team seeking to "trick" or "catch them" through response inconsistency. Alternatively, the feasibility of crafting different modalities from which patients may choose from may

be explored, thus offering patients a choice in terms of how to best express their pain.

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