Problematic pain – redefining how we view pain?

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Abstract

The term 'problematic pain' is relatively new and has been the recent source of much debate, especially among primary and community care pain clinicians. In this article, we review the concept of problematic pain, highlighting how it fits in the context of acute, sub-acute and chronic pain. We also examine how risk for the development of chronicity can be assessed using current data and screening tools. The use of ultra-short screening tools for other conditions has previously been evaluated in the literature, and we propose a new tool, to open discussion for the assessment of problematic pain. This is especially relevant in the short consultation where it can be difficult to capture meaningful information quickly. Finally, we focus upon new initiatives currently in progress in the arena of problematic pain in the United Kingdom.

Keywords

Problematic pain, sub-acute pain, chronic pain, risk, early intervention, screening tools

Introduction

'Problematic pain' is a relatively new term that has emerged in the field of pain management. The term is currently being debated by key stakeholders, and consideration is still being given as to whether others may better describe the concept (e.g. 'complex pain' or 'high impact pain'). This debate may continue; however, the importance lies in the concept itself. For the purpose of this article, 'problematic pain' will be used.

While the term may be relatively new, the concept itself is not new among front-line clinicians. Existing terms such as persistent pain, chronic pain, acute pain and sub-acute pain describe the chronology of pain but do little to identify the risk or morbidity associated with pain. Most front-line clinicians will be familiar with patients presenting with acute, sub-acute or chronic pain, although in the time-limited primary care consultation, the collection of prognostic pain information is rarely undertaken.¹ In the United Kingdom, approximately a third of the population suffers from chronic pain;² however, while there are reliable data to indicate the significant morbidity and health-care usage associated with established chronic pain,^{3–7} there are again no reliable data regarding those

with chronic pain who do not have significant disability or distress, and who will rarely seek help from a clinician for it.

The authors would contend that by defining problematic pain, we are better equipped to correctly identify pre-morbid chronic pain at an early (potentially preventable) stage, and also concentrate management strategies for those who have developed chronic pain and are most in need. The concept of problematic pain therefore has two facets:

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- To help identify those at risk of chronicity;
- To help identify those with chronic pain who are struggling to manage it.

Problematic pain has yet to be formally defined. A proposed working definition is

Any pain associated with, or with the potential to cause, significant disability and/or distress.

Acute, sub-acute and chronic pain – is the concept useful in daily practice?

Much work has already been done in identifying risk factors for chronicity; there are many factors with positive predictive value in this context.^{8–11} Less is known of the degree to which these factors are modifiable in daily practice, although there is evidence that early intervention can be effective in the prevention of chronicity.^{12–15} Secondary or tertiary chronic pain clinics are uncommon places of referral for acute or sub-acute pain patients, as by definition, pain at that stage has yet to become chronic. The mean wait time for referral can be protracted,¹⁶ and it is the authors experience that many patients have already undergone referral with other disciplines in the hope that a diagnostic assessment within the specialist setting will yield an important modifiable cause, resulting in pain reduction and return to normality.

If pain does progress to become chronic, the association with significant morbidity (in the form of distress and/or disability) has been well established;^{17–21} however, less is known about the population of patients who have chronic pain but do not suffer from significant distress and/or disability. Inferences can be made from existing data, which indicates that numbers in both groups (i.e. those in chronic pain with, and those without major disability and distress) are significant.^{22,23} This leaves the front-line clinician with difficulty not only in establishing whether or not the patient presenting with acute/sub-acute pain is at risk of chronicity, but whether or not those presenting with chronic pain require a more complex management plan for their condition.

Usually, an attendance in the outpatient setting reflects the fact that the pain has become problematic in terms of high pain intensity, with associated disability, and/or distress. This cannot be said for primary care where it is the role of the practitioner to establish diagnosis, risk and severity of co-morbidity to inform a future management plan. This is potentially a complex consultation, which is often led by a clinician with many generalist skills but who may be poorly equipped or supported to assess and manage such complex pain

problems. Defining patients with chronic, acute or sub-acute pain in this setting therefore has little utility. 'Problematic pain' as a term therefore can reflect those at risk of chronicity, or those currently struggling to manage pain.

Assessing risk in acute and sub-acute pain

In the acute and sub-acute setting, many screening tools have been developed to assist identification of those with pain at risk of developing chronicity. In 1997, the New Zealand Guidelines Group²⁴ published the now widely used flagging system for spinal pain designed to help identify those that may have serious spinal pathology (red flags) or those who may be at risk from chronicity (yellow flags).²⁵ This flagging system subsequently has been expanded to evaluate workplace-related issues (blue flags and black flags), and with those psychopathology (orange flags).²⁶ The World Health Organization (WHO) has previously published necessary criteria for screening tools²⁷ (Figure 1). It is debatable whether these criteria are fully applicable to *chronic* pain; however, considering the published evidence, it is likely that the best opportunity for prevention of chronicity lies with the early recognition of risk with screening, and appropriate modification of risk factors.

Specific tools have been developed assessing risk either for low back pain or musculoskeletal pain in general, including

1. The Orebro Musculoskeletal Pain Screening Questionnaire (OMPSQ);^{28–30}
2. The Low Back Pain Perception Scale (LBPPS);³¹
3. General Practitioner (GP) Prediction Rule;³²
4. STarT Back Tool.³³

Tools 1–3 are based upon a scoring system; the higher the score, the more risk. The STarT Back tool (Figure 2) is validated for screening those with low back pain and aims to stratify patients into low, medium and high risk of chronicity, according to the cumulative score (Figure 3). Initial work suggests that the use of a stratified approach in primary care can have both increased health benefit and cost savings.³⁴ There is also currently limited evidence that sub-grouping of low back pain into risk categories to guide decision-making can improve outcome.³⁵ Anecdotally, it has been found that STarT Back tool can improve the efficiency and utilisation of local health resources by reducing the need for referral in low-risk categories, but increasing proportionately the referral to more intensive services for those in high risk.

1. The condition should be an important health problem.
2. There should be a treatment for the condition.
3. Facilities for diagnosis and treatment should be available.
4. There should be a latent stage of the disease.
5. There should be a test or examination for the condition.
6. The test should be acceptable to the population.
7. The natural history of the disease should be adequately understood.
8. There should be an agreed policy on whom to treat.
9. The total cost of finding a case should be economically balanced in relation to medical expenditure as a whole.
10. Case-finding should be a continuous process, not just a “once and for all” project.

Figure 1. World Health Organization guidelines were published in 1968, but are still applicable today.

Patient name: _____ Date: _____

Thinking about the **last 2 weeks** tick your response to the following questions:

	Disagree 0	Agree 1
1 My back pain has spread down my leg(s) at some time in the last 2 weeks	☐	☐
2 I have had pain in the shoulder or neck at some time in the last 2 weeks	☐	☐
3 I have only walked short distances because of my back pain	☐	☐
4 In the last 2 weeks, I have dressed more slowly than usual because of back pain	☐	☐
5 It's not really safe for a person with a condition like mine to be physically active	☐	☐
6 Worrying thoughts have been going through my mind a lot of the time	☐	☐
7 I feel that my back pain is terrible and it's never going to get any better	☐	☐
8 In general I have not enjoyed all the things I used to enjoy	☐	☐

9. Overall, how **bothersome** has your back pain been in the **last 2 weeks**?

Not at all	Slightly	Moderately	Very much	Extremely
☐	☐	☐	☐	☐
0	0	0	1	1

Total score (all 9): _____ Sub Score (Q5-9): _____

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Figure 2. The Keele STarT Back Screening Tool.

The Keele STarT Back Screening Tool has been reproduced with the permission of Keele University, the development of which was part funded by Arthritis Research UK. The Keele STarT Back Screening Tool is designed for use by health care practitioners, with appropriate treatment packages for each of the stratified groups. The Keele STarT Back Screening Tool is not intended to recommend the use of any particular product.

The use of screening tools can be unpopular and time-consuming; however, short screening tools have in some cases been shown to be as effective in identifying pathology as longer ones³⁶ (two questions vs nine

Figure 3. The STarT Back Tool Scoring System.

in the screening of depression). It is also possible that there is a role for ultra-short tools to help decide who needs more comprehensive screening with a previously validated tool.³⁷

Ultra-short assessment tool in depression screening

Previous attempts have been made to apply this model of screening for other conditions such as depression.³⁷ In this context, if the clinician considers that depression may be present yet undiagnosed, he or she asks the patient two questions (below):

During the past month have you often been bothered by feeling down, depressed, or hopeless?

During the past month have you often been bothered by little interest or pleasure in doing things?

In this study, if a positive response was gained to either, the patient then completed a validated diagnostic tool to establish whether depression was present. This initial two-question screening tool showed high sensitivity and moderate specificity (97% and 67%, respectively) against the validated depression screening tool. For a short consultation, however, it could be that the real utility of such a brief tool is to decide whether or not it is necessary to further assess a clinical problem in more depth.

Problematic pain – constructing an ultra-short assessment tool

If the data from studies to establish risk of pain chronicity are evaluated closely, a picture starts to emerge from those risks that are frequently shown. Two large studies have reviewed risk for chronicity in detail^{38,39}

(Mallen et al. and Linton (Table 1)). The Mallen systematic review evaluated prospective primary care studies that focused upon all-cause risk factors. The Linton meta-analysis aimed to focus purely on psychological risk factors. Combining the results of both studies indicates five key factors showing strong prognostic validity:

- High pain intensity;
- Longer pain duration;
- High disability;
- Distress (depression, anxiety and catastrophising);
- Multi-site pain.

It is possible that this model of ultra-short screening could be applied to problematic pain. If we assume the above definition of problematic pain, and consider the study results from Mallen et al. and Linton, these risks can be combined in the following real-world questions to examine pain intensity, duration, pain-related disability and pain-related distress.

1. In the past month has your pain been bad enough to stop you doing many of your day-to-day activities?
2. In the past month has this pain been bad enough to make you feel worried or low in mood?

Evaluating

- Pain duration ‘... past two weeks ...’;
- Pain intensity ‘... pain been bad enough ...’;
- Level of pain-related disability ‘... day-to-day activities ...’;
- Level of pain-related distress ‘... worried or low in mood ...’.

Initial anecdotal usage of these two questions within Southport and Ormskirk NHS Trust Community Pain Service has been favourable and suggests the following:

- These two questions are easy to use and seem palatable for both clinician and patient;
- Using the above definition, the two questions do not seem to miss individuals with problematic pain;
- Diagnostically, the two questions alone struggle to accurately identify those with pain who are significantly disabled or distressed;
- The addition to a third question, for example, multi-site pain could improve the diagnostic accuracy but limit the convenience;
- Use as an accurate identifier for problematic pain is likely to be limited;

Table 1. Prognostic factors for risk of chronicity.

Factor	Number of studies associated with poor outcome	Number of studies not associated with poor outcome
Mallen et al.		
Higher pain intensity	20	3
Longer pain duration	23	5
Multiple site pain	11	0
Previous episode	11	6
Greater movement restriction	4	2
Higher disability	18	1
Linton		
Higher anxiety/depression	11	1
Higher somatic perceptions	7	0
Coping strategies	7	0
Social support	2	0
Older age	10	10

- Use as a ‘screening tool for a more accurate screen’ for problematic pain is possible;
- A properly conducted study could give valuable data regarding the actual utility of such a tool.

It may be too difficult at this time-point to screen for problematic pain as no agreed definition yet exists. It could, however, be more appropriate to establish the utility of this ultra-short screening tool in the identification of those who need further more detailed evaluation with tools such as STarT Back or OMPSQ (for those with low back pain or musculoskeletal pain respectively).

Developing the concept of problematic pain

The concept of problematic pain was formally introduced at the Pain Summit Meeting 2011. It was agreed as an outcome from this meeting (Recommendation A) that more clarity was needed to understand the concept better; the Royal College of Anaesthetists Faculty of Pain Medicine (FPM) were tasked with this as one of their work streams.

Further discussion resulted in agreement that the Primary and Community Care special interest group (PCC-SIG) from the British Pain Society would take this forward on behalf of FPM, as the problematic pain concept is highly relevant to primary care. Problematic pain is also integral to the Map of Medicine initial assessment and management pathway.⁴⁰ (It is also part of the PCC-SIG strategy to support educational initiatives highlighted by this pathway.)

Currently, this process is moving forward with the PCC-SIG organising the first multi-professional

stakeholder meeting planned for September 2013 with the following aims:

- To develop a consensus statement that defines problematic pain;
- Identification of standardised screening tools that are valid and reliable to enable a rigorous approach to both ‘at risk’ and ‘established persistent pain’ groups using one system;
- Preparation for a pain primary care Quality Outcome Framework (QOF) entry and subsequent allocation of points for this;
- Development of a Read Code for problematic pain;
- Development of appropriate support documentation for ultra-short screening tool use in front-line services;
- Supporting Royal College of General Practitioners (RCGP) Clinical Champion’s agenda to identify core primary care tools to screen and assess pain and for community/primary care audits;
- Delineating the educational resources would be helpful in rolling out the Map of Medicine⁴¹ pathways;
- Being a resource for future audit processes and research agendas.

It could be argued that all pain is problematic. Exploring the published evidence examining pain related disability, distress, risk for chronicity and impact upon quality of life a different conclusion might be reached.

It would seem necessary in any healthcare system requiring appropriate cost effective allocation of resource to appropriate patient, that stratification of risk and need is essential if we are to effectively manage both incidence

and prevalence of this condition. This document aims to contribute another facet to this discussion.

Conflict of interest

The authors declare that there is no conflict of interest.

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