

# **Development of an interprofessional questionnaire to identify attitudes and beliefs relating to pain management in students on multiple health programmes.**

## **Abstract**

### Background

Pain management is a key public health problem costing over £10 billion per annum and involves complex multi-professional perspectives in the provision of care. Pain sufferers however often perceive that management of their pain is not effective. Pain sufferers want to be partners in their pain management and to have confidence in the people managing their pain. To achieve a gold standard there needs to be meaningful interprofessional engagement in pain education. . Currently few Higher Education institutions engage in shared pain education between health professions and time spent on content is considered inadequate. Understanding different professional attitudes to pain management, starting at undergraduate level, may provide a basis from which to support the future education of students and promote a more holistic confident approach. There is a requirement to establish students' attitudes and beliefs in order to focus education resources appropriately.

### Aim:

To show the development and exploration of the validity and reliability of a short questionnaire to assess attitudes and beliefs about pain management in undergraduate professional health programmes.

### Method:

A literature search was undertaken to find attitudes to pain questionnaires for health professionals and seven validated questionnaires were identified. University Ethics approval was obtained. The items from the questionnaires were collated and duplicates removed. These were then reviewed by health professionals for content and face validity using the Delphi method, leaving a total of 30 questions. A total of 537 second year students were invited to participate, 217 completed (40% response rate) from midwifery, nursing, operating department practice, occupational therapy, physiotherapy and paramedic science programmes. A group of 22 students answered the questionnaire twice. Item consistency response was reviewed. Cronbach's alpha was used to measure internal consistency, factor analysis with varimax rotation was used to identify groupings of items, the Bland and Altman method and inter correlation coefficient (ICC) were used for test re-test reliability.

### Results:

Results for all 30 items were obtained from; 32 midwifery, 55 nursing, 13 occupational therapy, 7 operating department practice; 56 paramedic science and 52 physiotherapy students. Items that represented consistent knowledge were removed, leaving 22/30 items. Factor analysis was performed and items relating with a factor loading threshold of 0.4 and an Eigen value of > 1.0 were kept. Ten items were kept. Factor analysis identified 3 groupings of items which related to attitudes and beliefs about: 'Chronic Pain'; Living and working with chronic pain; Sedation and pain relief. For the three groupings overall Alpha's ranged from 0.719 to 0.610 indicating good internal consistency. The test-retest ICC for each of the items ranged from 0.542 to 0.962 and the Bland and Altman method revealed 95% of the points lay within the limits of agreement.

## Conclusion

This research contributes to knowledge relating to attitudes and beliefs to pain management by students on health profession programmes. It reports on the development and initial validation of a short questionnaire to capture these attitudes and beliefs. This questionnaire can be used to assess students' understanding across multiple health programmes and will contribute to the development of education materials. to enhance education of students as they seek to become to holistic confident practitioners.