# Attitudes and beliefs relating to pain management among undergraduate students in six health care programmes

## Background

Pain management is a global priority as the costs to society through health provision and the loss of productivity are significant. It affects approximately one fifth of the population of whom half record chronic pain. Chronic pain is complex, often accompanied by comorbidities and is difficult to manage. Pain management requires a holistic approach that involves multiple health professionals and pain sufferers working together. There is a requirement for health professionals to understand pain, and how it is best managed so that they can confidently work together and with pain sufferers to support a holistic approach. Increased education relating to pain correlates positively with changes in attitudes to pain, and improves health professionals decision making. However, hours spent engaged in undergraduate pain education is limited and most of the time delivered uniprofessionally. There is a limited understanding of the attitudes and beliefs of undergraduate health professionals to pain management.

The aim of this study was to explore attitudes and beliefs to pain management among undergraduate health care students using a short 10 item questionnaire

#### Methods

The study sample consisted of students (n=217) from a Faculty of Health and Social Sciences in a University in the UK. After University Ethics approval was obtained students received an invitation email to take part in an online survey. A total of 537 second year students were invited of whom 40% responded by completing a questionnaire from the following programmes; midwifery, nursing, operating department practice, occupational therapy, physiotherapy and paramedic science. Programmes were reviewed to explore current shared learning around pain management. The questionnaire consisted of 10 items with a 6 point Likert scale, divided into 3 factors relating to attitudes and beliefs about; 1 'Chronic pain'; 2 'Living and working with chronic pain; 3 'Sedation and pain relief'. SPSS v23 was used for the data analysis which included demographic characteristics, Mann Whitney U was used to explore differences between the scores and of students in different professional programmes.

## Results:

Student participants consisted; midwifery (n=32) 15%; nursing (n=55) 25%; occupational therapy (n=13) 6%; Operating department practice (n=7) 3%; paramedic science (n=58) 26%; Physiotherapy (n=52) 24%. The average ages of the participants ranged from 24-31 years in the programmes of whom 75% were female. There was no evidence of planned shared learning around pain management. The total scores for the 10 items ranged from 37 to 41. There were no significant differences between professions for the total scores. The three factors were analysed. 1.'Chronic pain'; there were no significant differences between professions; 2.'Living and working with chronic pain'; physiotherapy students scored

significantly higher than midwifery students (U=667.50, r=0.13, P<0.01), there were no significant differences between the other professions. 3. Sedation and pain relief nursing scored significantly higher than both physiotherapy (U=953.0, r=0.09,p<0.01) and paramedic science (U=1078.50, r=0.08, p<0.01) there were no significant differences between the other professions.

## Conclusion

This study provides new knowledge relating to attitudes and beliefs to pain management among students on six health care programmes. Total scores of the questionnaire indicated no significant differences between professions. Physiotherapy students showed greater understanding about 'living and working with chronic pain' than midwifery students. This may reflect current education which focuses on chronic pain management and rehabilitation. While midwifery education considers acute pain management associated with pregnancy and labour. Nursing students showed greater understanding relating to 'sedation and pain relief' than physiotherapy and paramedic science students which may reflect their focus relating to care of surgical patients.