

Abstract

Background: There is evidence that the beliefs and attitudes of physiotherapists are associated with their choice of patient management. The fundamentals of these beliefs are thought to have been realized during their university studies. Until now, however, no official study has researched how university education influences the beliefs of physiotherapists and how this is associated with their development in the Czech Republic

Objectives: To describe the development of the physiotherapy students' beliefs and attitudes towards low back pain and their understanding of pain knowledge in the Czech Republic. Furthermore, to investigate whether or not there is any correlation between these topics.

Participants: First-year physiotherapy students, Third-year physiotherapy students, Fifth (the second magister year) year physiotherapy students, and non-healthcare students within the age range of 22 to 26 (control group)

Methods: 1) completion of translated and cross-cultural adapted *The Back-Pain Attitudes Questionnaire* (Back-PAQ), 2) completion of translated and cross-cultural adapted *The Neurophysiology of Pain Questionnaire* (NPQ)

Results: 251 respondents were included. The mean Back-PAQ score was within the controlled group 107 (SD 8.47) and there was a significant decrease in score in the fifth-year group to 95.4 (SD 12.5, $p < 0.05$). The mean NPQ score in the controlled group was 6.92 (SD 3.65) and there was a significant increase in NPQ score in the third-year group to 9.99 (SD 2.96, $p < 0.05$). There was no significant following increase in the fifth-year group (11.3, SD 2.58, $p=0.15$). There was a noticeable correlation between the Back-PAQ score and NPQ score suggesting that the higher NPQ score correlates with the lower Back-PAQ score (Spearman's $\rho = -0.201$). But it explains just the variance of 4% ($R^2 = 0.04$).

Conclusion: It was found that the Czech physiotherapy students gain more adaptive beliefs to low back pain up to the fifth year of study and that this change is relatively small. Moreover, it was found that students gain a better understanding of pain knowledge during their bachelor's studies, after which there is no increase in their understanding in the following years of their studies. In addition to this, the study showed that attitudes towards low back pain and understanding of pain knowledge have a direct correlation. This is the first study that attempts to comprehend the beliefs and attitudes of physiotherapy students of Czech Universities towards low back pain.