1. **Project title**

PUnCQ; Pain Understanding and Confidence in undergraduate Healthcare Professional Students and General Practitioners in Australia.

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1. **Background information.**

In Australia, approximately one in five of the general population experiences chronic pain. Pain is a complex condition to manage; it can have a major impact on individuals and their families and exerts a major burden on healthcare and on society as a whole. It is essential, on both a humanitarian and clinical effectiveness level that healthcare professionals are provided with the education required to assess and manage pain in the patients they care for (IASP 2004).

Recent large-scale surveys have clearly identified inadequate education, as well as inappropriate attitudes and beliefs of staff, to be a significant contributing factor in the ‘woeful inadequacies’ of pain management, both internationally (Bond et al 2007) and in the curricula of healthcare professionals in Australia and New Zealand (Shipton E, 2018), the UK (Briggs et al 2011) and across Europe (APPEAL, Pain Europe 2013; Briggs et al 2015).

In Australia and New Zealand, a survey of all 23 higher education institutions providing medical student education found that education on pain in many current undergraduate courses comprised only 20 hours on average of the overall curriculum (Shipton E, 2018). The survey also found that teaching on pain is often delivered piecemeal as part of other topics and is rarely taught as a discrete element, with wide variations in the pain content of the curriculum between different institutions. Specific learning objectives for pain medicine were not identified by 42% of medical schools. Treatment of pain requires a multidisciplinary approach but the evidence suggests that undergraduates learn about pain management in a fragmented manner, often in isolation from other professional groups.

A questionnaire survey of GP’s in Tasmania found barriers to management of persistent pain management, principally, patient expectations, lack of access to allied health and specialist pain services and worries about drug side effects or abuse (Veal, et al., 2017).

Recent piloting of a newly-developed questionnaire that assesses pain knowledge, understanding and confidence in healthcare profession students has identified deficiencies and differences across groups of final year pre-registration medical and physiotherapy students in Scotland in terms of knowledge and understanding but common theme of decreased confidence (Seenan et al 2017). 85% of respondents said they would like more education on pain management in their undergraduate course.

There is therefore evidence to suggest that pain education and pain management is unsatisfactory, in the UK. I wish to repeat this study in Australia, looking at the knowledge, confidence and attitudes of General Practitioners.

Multidisciplinary rehabilitation is recognised to reduce pain and improve function in patients with pain (Guzman et al 2001; SIGN 2013). However, some health care professionals with negative views about pain or who have high levels of fear avoidance beliefs are more likely to consider sick leave and avoidance of activities to be appropriate interventions (Bishop et al 2008; Linton et al 2002), which is contrary to best practice. In addition there can tend to be a focus on managing pain with medication as a first line treatment, which has led to increasing concern about levels of prescribing of opioids (Clark S, 2018) (Donovan PJ, 2019).

Little is known about the understanding and attitudes of healthcare profession students and GPs to chronic pain.

1. **Aims and objectives of the study.**

The aims of this project are:

1. Investigate the attitudes and beliefs of healthcare professional students and GPs towards chronic pain.
2. To compare the attitudes and beliefs of healthcare students with each other and across Higher Education Institutions.
3. To compare the attitudes and beliefs of general practitioners with each other and across length and location of practice and Higher Education Institution attended.
4. **Brief description of participants and recruitment methods (sample, numbers, access, recruitment and inclusion and exclusion criteria)**

Participants:

All pre-registration healthcare profession students at Australian Universities. All students who have a role in assessing and treating pain will be approached to complete this study including medical, dentistry, nursing, midwifery, psychology, and all allied health science students. All GPs registered with the RACGP.

Recruitment of Students:

A recruitment email will be sent to all potential participants (see Appendix 4) by a representative at their own department. Permission to contact students will be gained from the appropriate gatekeepers (Appendix 5). There are no exclusion criteria.

Inclusion and Exclusion Criteria:

Participant will be included if they are enrolled on a pre-registration programme studying to become a healthcare professional in an Australian University.

Recruitment of GPs:

A recruitment email will be sent to all potential participants (see Appendix 6) by a representative of the RACGP and GP Liaison Officers.

Inclusion and Exclusion Criteria:

Participant will be included if they are a GP in Australia.

There are no exclusion criteria.

1. **Brief description of the research methods and measurements. Include details on how the data will be securely stored and disposed of.**
2. This is a prospective, quantitative and qualitative, questionnaire study. An online survey tool will be used to gather information using the Pain Understanding and Confidence Questionnaire (PUnCQ) (Seenan et al 2017) which will be processed and analysed.

Questionnaires:

Participants will be contacted by email and provided with a link to the online questionnaires. Once they have reviewed the information sheet and provided informed consent, if they wish to take part they will click on the link and complete the questionnaire which should take no more than 5 minutes. They will then exit the study.

The survey will also be publicised to students through representative bodies such as the Australian Medical Students Association, Australian Physiotherapy Association and Australian Psychological Association. Students will also be emailed directly by course organisers who are willing for their students to be contacted about the study.

The study will be puclicised to GPs through the RACGP and they will also be emailed directly through GP Liaison Officers who are willing to send the information on.

Ethical and legal practice will be followed, and all of the information gathered will be handled in confidence. All responses will be treated in confidence and no personal details will be stored. No identifying information will appear in any documents or in the final report.

1. **Consent, confidentiality and anonymity**

The survey will be anonymous, but will record basic demographic information (e.g. profession, level of study). Participation will be voluntary and participants can withdraw at any point without giving a reason; the survey will include an informed consent procedure at the start.

Any analysis and reporting of the results of the study will maintain this anonymity and confidentiality.

1. **Risks to participants/self**

There are no identifiable risks involved in participating in this study.

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**APPENDICES:**

**1a – Participant information sheet, students**

**1b – Participant information sheet, GP’s**

**2a – PunCQ; Pain Understanding and Confidence Questionnaire, students**

**2b – PunCQ; Pain Understanding and Confidence Questionnaire, GP’s**

**3 – Participant Invitation email – students/GP’s**

**4a – email to course organisers**

**4b – email to GPLO’s**

**5 – Information to be distributed by AMSA, APA (Physiotherapy & psychology), ADA, RACGP**