Submission to the Victorian Inquiry into Women's Pain

July 2024

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Executive Summary

The Australian Medical Students Association (AMSA) welcomes this inquiry into Women's Pain and believes it is a much-needed initial step in creating a more equitable healthcare system in Australia. As the future medical workforce we are uniquely positioned to identify opportunities for direct action to ensure we are well-equipped to provide equitable health care. Changing the healthcare landscape in Australia will require a bottom-up approach with changes to the education of our future healthcare providers.

This submission highlights critical gaps in the current medical education system regarding the recognition, diagnosis, and management of women's pain. To address these issues:

1. AMSA proposes that Australian Medical schools:
    a. Commit to building a team of pain specialists equipped with the necessary skills and resources to deliver a comprehensive pain medicine curriculum integrated into all medical program years.
    b. Incorporate experts in gender medicine to offer diverse perspectives in medical curricula and centre education on women's pain on the voices of women living with chronic pain as emphasised in the feminist ecological model.
    c. Utilise a "Flipping the Pain Curriculum" approach in medical curricula.
2. AMSA proposes that the Australian Medical Council:
    a. Develop a standardised and specific set of learning outcomes and competencies concerning gender and health education that all medical schools must adhere to.
3. AMSA proposes that Specialist medical colleges and the Australian Medical Association (AMA):
    a. Implement continuing education programs for current healthcare providers to mitigate existing biases and improve patient outcomes.
    b. Implement communication training to promote empathy and validate patients' pain experiences, regardless of gender, and to foster more equitable healthcare practices.
4. AMSA proposes that the Victorian Government:
    a. Increase and allocate funding for clinical placements that give more exposure to pain management, particularly in community health services.
    b. Increase and allocate funding for medical research on the influence of gender on patient presentations and management.
5. AMSA proposes that Research Institutions:
    a. Increase research and reliable data on the confounding effect gender has on pain and patient outcomes.
    b. Conduct more research into gender and health education in medical schools and healthcare workers' continuing professional development.

Introduction

The Australian Medical Students' Association (AMSA) is the peak representative body for the over 18,000 medical students across Australia. AMSA Sexual and Reproductive Health (SRH) is a global health initiative that advocates on a wide range of sexual and reproductive health issues, including menstrual hygiene, contraception, sexually transmitted infections, sexual assault and obstetrics and gynaecology more broadly. AMSA Gender Equity is an AMSA representative group which is committed to improving the right to accessible health care for all genders and recognises the impact that power differentials, systemic inequities, discrimination and harassment have on health outcomes for women, trans and gender-diverse people. Finally, AMSA Medical Education (Med Ed) is an AMSA initiative group that strongly focuses on improving medical student education including advocacy into Australian medical curriculums and placement experiences. These three AMSA initiatives have collaborated to produce this submission, each providing a unique perspective.

Disease manifestations in women are underrepresented within medical education due to a stronger focus on patterns of disease in cisgender males, resulting in adverse health outcomes for women (Verdonk et al., 2009). This bias extends to medical research, with significant gaps in understanding cardiovascular, neurological, gynaecological, and autoimmune conditions in women (Australian Medical Students' Association, 2022; eClinicalMedicine, 2024). Furthermore, social normalisation of women's pain among the public and health professionals results in delays in referral, diagnosis and appropriate management due to insufficient education and awareness (Australian Medical Students' Association, 2022; Armour et al., 2020). In particular, gendered norms about patients' experiences and expressions of pain as well as coping styles further exacerbate biases in pain treatment, decreasing patient trust and increasing feelings of dismissal (Ballard et al., 2006; Samulowitz et al., 2018). Thus, all levels of medical education should make a deliberate effort to acknowledge and teach the differences in presentations, treatment and management between genders, as well as the importance of patient-centred care and communication when it comes to reproductive conditions such as chronic pelvic pain. The role of medical students in providing care to patients as future healthcare professionals should not be understated.

AMSA recognises that language around diversity, equity, and inclusion continuously evolves, and different words can have different meanings for different people. In this submission, we have utilised the language specified in the terms of reference; however, we would like to note that AMSA strives to be as inclusive as possible in the language that we use. We recognise that cis women, transgender women, transgender men, non-binary individuals, gender non-conforming individuals and gender diverse individuals overall may all experience the gender pain gap and deserve to be recognised through this

inquiry. For this reason, our submission supports a range of experiences of the gender pain gap, including, but not limited to those of cisgender women.

To gain a deeper understanding of the current efficacy of medical education on women's pain, we surveyed 93 medical students across Australia over four weeks (from May 13th to June 10th 2024). We surveyed students about the breadth and depth of their medical school teaching on women's pain and their confidence in the topics they had been taught. The survey ended with the exploration of medical students' personal beliefs and experiences in witnessing medical gender bias through both quantitative and qualitative questions.

Demographic data of responses

The survey was completed by predominantly females (81%), followed by males (15%), gender-diverse (2%) and non-binary (1%) medical students. Additionally, 36% of respondents identified as a member of the LGBTQIASB+ community and 3% as First Nations People. While the survey was open to all Australian medical students, the majority of students who responded were currently studying in Victoria (49%), New South Wales (24%) and Queensland (18%). There was a largely even distribution of students across metropolitan (47%) and regional (51%) sites as the locations where they had completed most of their medical school placements. Finally, it is important to note that most students were in their first year (38%) or second year (32%) of clinical placements. However, some students had completed no clinical placements (18%).

Survey Results

1. Medical Education

When asked to estimate the percentage of women who experience chronic pain, the majority of students estimate between 10% and 40%. This figure has been estimated at 21% (Australian Institute of Health and Welfare, 2020); however that is as high as 40%, per a recent landmark survey conducted in Victoria exploring women's health (Premier of Victoria, 2024). This suggests that medical students recognise that women's chronic pain is a significant issue in the Australian community. However, those who completed our survey reported significant gaps in their curricula regarding women's pain. While 94% acknowledged that clinical presentations can differ by gender, only 23% felt their education adequately addressed this issue, indicating a need for more detailed coverage of women's pain beyond the basic concept of gender-based differences in pain presentation.

The survey also explored gaps in the medical curricula across Australia, focusing on the recognition and diagnosis of pain in women, as well as disparities in pain management between men and women.

Recognition and Diagnosis

Half of the participants reported feeling inadequately trained in recognising and diagnosing both gynaecological and non-gynaecological causes of pain in women. Furthermore, 62% of students with no clinical experience felt underprepared, which decreased to 53% for those in their first year of clinical placement and 38% for those in their second year. Interestingly, 50% of students with more than one year of clinical placement still felt inadequately trained in this area, suggesting that the training on recognising and diagnosing sources of women's pain is implemented inconsistently throughout medical schools in Australia. This was echoed in the qualitative section of our survey, wherein students described having isolated learning experiences about women's pain that were helpful but not well integrated with the remainder of the curriculum. One student eluded to a lack of teaching on chronic pain experienced by women:

"There are a few mentions of differences in presentations but there's not been specific discussion on how to approach it. There was some teaching on chronic pain but none focused on women specifically."

- *Third Year Medical Student at the University of Queensland, Queensland*

Pain Management

68% of participants reported not receiving education on evidence-based treatments for women's pain. Furthermore, 77% of students in their first clinical year believed that education in this area needs to improve. This percentage decreased to 52% for students in their second clinical year but increased again to 75% for students with more than two years of clinical placement. As with our findings on recognition and diagnosis, this suggests variable education implementation regarding managing women's pain throughout medical school in Australia.

Moreover, 78% of students reported not receiving education on the potential disparities in pain management outcomes between male and female patients. This further emphasises the lack of nuanced education in medical schools regarding personalised pain management relative to gender. This was echoed by students in the qualitative component of our survey, with one student stating:

"...more needs to be done. Simply stating differences in women is not enough."

- *Third Year Medical Student at Deakin University, Victoria*

Our results are legitimised by the curriculum audit completed by the International Association for the Study of Pain (IASP) which revealed that only 42% of Australian and New Zealand medical schools had partially implemented the recommended IASP Curriculum Outline on Pain for Medicine (Shipton, 2018). As is reflected by the results of our survey, medical schools in Australia or New Zealand have yet to achieve full integration of the curriculum.

2. Medical student confidence

When asked to rate their confidence in differentiating variations in women's pain presentations, 41% of the survey respondents reported low confidence, while only 9% felt fairly or extremely confident. This finding is consistent with research indicating that medical education often lacks comprehensive training on gender-specific pain presentations, leading to inadequate preparation for future physicians (Chen et al., 2008; Samulowitz et al., 2018). For instance, Samulowitz et al., (2018) highlighted that healthcare providers often receive inadequate training on gender differences in pain perception and management, leading to disparities in care.

Communication skills demonstrated more encouraging results, with 43% expressing higher confidence levels in their ability to communicate effectively with female patients about their pain symptoms and concerns, yet 24% still felt inadequately prepared. Effective communication is crucial for patient care, especially in understanding and managing pain. However, research suggests that medical training often does not emphasise the importance of gender-sensitive communication which can leave healthcare providers underprepared (Merone et al., 2024).

Confidence in understanding treatment and management strategies for chronic pain was particularly low, with 45% of students reporting low confidence and only 8% feeling confident. This aligns with findings that chronic pain, especially in women, is often underrepresented in medical curricula, leading to lower confidence among medical students (Chen et al., 2008; Samulowitz et al., 2018). Studies such as Safdar et al. (2022) have shown that gender disparities in pain management are prevalent, with female patients less likely to receive adequate pain relief compared to male patients. (Safdar et al., 2022)

3. Personal Beliefs and Experiences

The survey explored medical students' personal beliefs and experiences regarding elements of education around women's health and female patients. When asked if they believed there to be a stigma surrounding women's pain, either within medical education or in clinical practice, approximately 78% of participants answered yes, 11% responded no, and 11% were unsure. When prompted to share their experiences, examples of stigma they flagged included doctors undermining the severity of pain that female patients reported, withholding appropriate pain relief, and disregarding female patients' experiences with chronic conditions such as endometriosis and irregular periods. One student shared their experiences with witnessing stigma:

> *"...women are dismissed by not just male but female practitioners too."*
>
> *- Third Year Medical Student at Deakin University, Victoria*

Research in women's pain management

Regarding whether participants believed there was a need for more research in women's pain management, 87.3% answered yes, 1.6% answered no, and 11% were unsure. It is increasingly evident that research conducted on pain rarely considers the differences in presentations between sexes or takes note of the confounding effect gender has on the outcomes. One study suggested that less than 20% of studies plot their data based on sex and/or gender. (Bernardes et al., 2024). This fails to address the differences in pain presentation between male and female participants of trials and under-emphasises the importance of understanding said differences for clinical practice. There is also further discussion to be had regarding the implementation of research in clinical guidelines for pelvic pain. According to the Australian & New Zealand College of Anaesthetists and Faculty of Pain Medicine, as of 2024, 16 out of 20 international guidelines on pelvic pain management "failed to meet guideline development standards, and many did not consider the benefits of non-surgical, multidisciplinary treatments for the condition" (Australian and New Zealand College of Anaesthetists, 2024).

Doctor-Patient Communication

Medical students who undertook our survey were asked about the existence of observable differences between the communication of healthcare providers with female and male patients regarding their pain. The results demonstrated that 46% of students affirmed the existence of these differences, while 35% were unsure, and 17% had not observed this. In a follow-up question prompting elaboration, participants shared experiences of female patients' pain being "dismissed", "taken less seriously", "disbelieved", and "disregarded" in comparison to male patients. To back these claims, participants cited anecdotal experiences from placements, with one student having "repeatedly seen doctors" engaging in these communication differences. In contrast another participant implicated "multiple midwives and nurses" engaged in this behaviour, proving that reform to remedy the gender pain gap requires engagement from all healthcare professionals. One such example of witnessed differences shared by a student was:

"I have repeatedly seen doctors on placement disregarding females' pain and telling them that their dysmenorrhoea [painful periods] is simply part of being a woman. I have also seen doctors tell many women there is no further management available for their pain."

- Fourth Year Medical Student at Monash University, Victoria

Another very telling example of dismissal of women's pain shared was:

"Women in pain were more likely to be put into positions that exacerbated their pain for the point of clinical examination whereas men with the same pain weren't and appeared to be more readily taken at their word."

- Third Year Medical Student at Monash University, Victoria

It must be noted that these beliefs are echoed in existing literature, with a study on 'Gender Bias in Health Care and Gendered Norms towards Patients with Chronic Pain' concluding that female patients with chronic pain, "frequently reported being mistrusted and psychologised by their health-care providers," grappling with being perceived as "emotional, complaining, [..] and fabricating the pain" in their interactions with healthcare professionals (Samulowitz et al., 2018).

Overall, medical students' personal beliefs and experiences demonstrated a sense of urgency to seek reform to the unjust and harmful approach to women's health and female patients' experience of pain, which spans from stigma to lack of research to unequal gendered healthcare interactions.

Recommendations

1. Better Pain Education for medical students and health professionals

Given our survey's findings, there is a need for pain education to be prioritised and improved in the Australian Medical Curriculum, with one response calling for:

> *"more integration of pain medicine education… based on IASP International Guidelines."*
>
> *- Third Year Medical Student at Deakin University, Victoria*

Moretti et al. (2023) suggested that lessons on the intersections of health, gender and pain should be integrated into all medical school curricula spanning all years of study. Learning about the biological, sociocultural and psychological factors of gender that contribute to pain, as well as the multidisciplinary management of pain, is severely lacking in medical schools. The curriculum should include lectures, case studies, and interactive workshops to build medical students' confidence in providing equitable care to all patients. Additionally, the course should feature experts in gender medicine to provide diverse perspectives and insights. We should aim to educate the future physicians of Australia on the multidimensionality of pain symptoms, the gender biases in pain and management and the skills necessary to address the gender pain gap (Moretti et al.; Shipton et al., 2018).

As suggested by the survey findings, medical student confidence can also be significantly impacted by the inclusion, or lack thereof, of gender medicine in their education. When gender theory and gender-specific health issues are inadequately covered, students may feel less prepared to address the diverse needs of their patients. This lack of confidence can translate to real-world clinical settings where physicians may hesitate or feel uncertain about providing equitable care, further perpetuating disparities. Therefore, integrating comprehensive gender medicine education into medical school curricula could enhance student confidence and improve overall patient care outcomes. This should involve theoretical knowledge and practical communication skills to

ensure future physicians can effectively address and treat women's pain (Khamisy-Farah & Bragazzi, 2022; Miller et al., 2013).

Evidence suggests that students are more engaged in pain education, which utilises "personal stories of pain" (Shipton et al., 2023). This patient-centred focus on women's health conforms to the 'Feminist Ecological Model', which demonstrates that education about women's pain is most beneficial for both the patient and medical student when it centres on the voices of women living with chronic pain (Balogun-Mwangi et al., 2016). In line with this, 46% of survey participants cited a memorable event of observed difference in how healthcare providers communicate about pain with female versus male patients. These findings suggest that interest in pain management increases with a direct connection to real-life stories. Therefore, "this exposure is important so that students see the continuum of pain care and the impact of pain on patients" (Shipton et al., 2023). In addition, communication skills training specific to pain is recommended as an educational tool to catalyse empathy, empowerment, and self-reflection (Moretti et al., 2023; Shipton et al., 2023).

It is recommended to follow a "Flipping the Pain Curriculum" approach, which starts by advocating for epidemiological, social, and psychological aspects of pain and disability (Shipton et al., 2023). Students would then progress to the more detailed biomedical aspects of pain management, once impacted by personal stories through clinical placements, case discussions, and role-playing. This recommendation is informed by the Four-Dimensional Curriculum Development Framework, an Australian template designed to enhance interprofessional health education by prioritising "connecting content and activity with purpose and consequence" (Shipton et. al , 2023).

Furthermore, there is a "known lag of 17 years between publication and translation to patient management through clinical guidelines" (Merone et al., 2024). Thus, despite women's participation in clinical trials increasing in recent years (Labots et al., 2018), it will take significant time before these results are reflected in medical school curricula, textbooks, and patient care. Therefore, to address this delay, medical schools must commit to building a team of pain specialists equipped with the necessary skills and teaching resources to deliver comprehensive pain medicine curricula. A student reaffirmed by a student in our survey reaffirmed this:

"I wish there was more research on this topic so that more EBM [evidence-based medicine] practices can be taught and applied in medical school."

- Third Year Medical Student at Bond University, Queensland

Finally, continuing education programs should be implemented for current healthcare providers to mitigate existing biases and improve patient outcomes. Institutions should also promote a culture of empathy and validation of patients' pain experiences, regardless of gender, to foster more equitable healthcare practices.

2. Increased funding for clinical placements

Increasing funding for clinical placements that provide more exposure to pain management, especially in community health settings, is crucial. Community health placements can offer medical students diverse experiences with populations that experience health disparities, including women with chronic pain. These placements can enhance students' understanding of the social determinants of health and improve their competence in managing complex pain conditions (Shipton et al., 2018). Targeted funding for such placements will ensure that medical students gain practical experience and are better prepared to provide effective, empathetic care to women experiencing pain. Greater clinical exposure to pain medicine has been previously offered to explain disparities in students' confidence and knowledge. Sufficient clinical experience with patients experiencing pain is necessary to ensure that medical students cultivate inclusive attitudes towards all patients, including women. (Lechowicz et al., 2019; Shipton et al., 2022)

Ultimately, it is recommended that education on women's pain be integrated holistically throughout clinical placements, rather than being confined to the obstetrics and gynaecology rotation to reflect the widespread impacts of the gender pain gap on all fields of medicine. This is especially pertinent given that the pain gap exists beyond obstetrics and gynaecology, including oncology, neurology, immunology and nephrology (Merone et al., 2022). Incorporating these recommendations could significantly enhance the quality of care provided to women, ensuring their pain is taken seriously and managed effectively. This will improve patient satisfaction and health outcomes and align with broader efforts to advance health equity and reduce systemic biases in healthcare.

3. Increased research on women's pain and their outcomes

Our survey results convey the pressing need for more comprehensive and high-quality research on women's pain and their outcomes. A lack of standardised care based on quality research and guidelines is seen globally. One systematic review from BJOG: An International Journal of Obstetrics and Gynaecology, reports that overall, "females with persistent pelvic pain (PPP) report great variability in treatments recommended to them despite the availability of clinical practice guidelines (CPGs) that aim to standardise care" (Mardon et al., 2021). Through quality appraisal, the majority of analysed international CPGs were classified as "poor" in the domain of "applicability" (Mardon et al., 2021).

By increasing research efforts in this area, we can develop more effective, evidence-based guidelines that ensure consistent and standardised care for women experiencing pain. Additionally, prioritising studies that focus on the unique experiences and biological differences will help address the current gaps in knowledge and improve the applicability of clinical practice guidelines (Liu & DiPietro Mager, 2016; Samulowitz et al., 2018). Such efforts will ultimately lead to

better pain management, enhanced patient outcomes, and a reduction in the disparities seen in the treatment of women's pain

4. Implement communication training to promote empathy

Our findings underscore the urgent need for healthcare providers to engage in communication training that promotes empathy and reduces bias. Wesolowicz et al. (2018) described what may underlie communication differences, as while healthcare providers are trained to be "neutral providers," "they are subject to the same social influences that foster gender/gender-related biases in the general population" (Wesolowicz et al., 2018). Another study centred around Australian women emphasised the long-term impact that dismissal from doctors can have on a patient's trust in the medical system, leading to further negative health outcomes (Merone et al., 2022). It was found that "owing to the difficulties they experienced in obtaining a clear diagnosis, [female patients] had ultimately stopped seeking answers for their symptoms", with one female participant stating, "Honestly, I will let something go until I'm near being hospitalised now because of a lifetime of being dismissed or not believed" (Merone et al., 2022).

Implementing communication training can help ensure that all patients, regardless of gender, feel heard and validated in their concerns (Byrne et al., 2023). By fostering a more empathetic and inclusive approach to patient interactions, healthcare providers can build trust, improve patient satisfaction, and ultimately lead to better health outcomes. Addressing these biases and enhancing communication skills is essential in creating a healthcare environment where every patient feels respected and valued (Derksen et al., 2013).

Conclusion

This submission highlights the significant disparities in medical education related to the underrepresentation of disease manifestations in women and gender-diverse individuals. These inequities result in adverse health outcomes due to a strong focus on patterns of disease identified in cisgender males. Our findings emphasise the urgent need to integrate comprehensive gender medicine education throughout medical curricula to improve the recognition, diagnosis, and management of women's pain.

These disparities are further amplified by biases and stigmas in clinical practice, affecting women's health outcomes and patient care experiences. Our survey has underscored the critical gaps in medical students' training and confidence in managing women's pain, revealing a need for a holistic and continuous approach to education that spans beyond specific rotations and includes patient-centred, real-life stories.

We appreciate the opportunity to make this submission and welcome any further queries or requests for additional information.

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