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## Menstrual health education in Australian schools

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### ABSTRACT

Menstrual health literacy has a direct impact on young peoples' quality of life, health, academic and professional performance. In Australia, the key learning area of Health and Physical Education [HPE] provides opportunities for students to develop menstrual health literacy. This paper reports on the findings of a survey of 5007 young Australian women aged 13–25 on their experiences of menstruation, dysmenorrhea and education. The discussion herein relates to the qualitative component that asked the question 'What was the most useful information about menstruation received in HPE [Health and Physical Education] class?' Applying a thematic analysis to the data, three key themes emerged. These include: (a) it's all just biology; (b) the cause but not the effect, and; (c) too little, too late. The findings suggest limitations in educational approaches taken by teachers potentially resulting in poor menstrual health literacy portending long-term negative health consequences for some individuals.

### KEYWORDS

Menstrual health literacy;  
health & physical education;  
periods; menstruation;  
menstrual health education

## Introduction

Menstrual health concerns are common across the population. Period pain (dysmenorrhea), typically associated with cramping, nausea, vomiting, sleeplessness, depression, headaches and other conditions, is the most common gynaecological disorder in young women (French, 2008) and affects just under three quarters of young women worldwide (Armour, Parry, Manohar et al., 2019). In Australia, around 90% of those under 25 report regular period pain (Armour et al., 2020; Parker, Sneddon, & Arbon, 2010). Although a common issue, less than half of those who experience dysmenorrhea in Australia seek medical assistance (Armour et al., 2021; Subasinghe et al., 2016; Treloar, Bell, Nagle, Purdie, & Green, 2010). This reluctance to access medical assistance is frequently due to an underlying intergenerational discourse that positions period-related pain as a 'normal' part of the menstrual cycle and as something to be tolerated (Bodén, Wendel, & Adolfsson, 2013) and seems to be common across geographical and cultural boundaries (Barrington, Robinson, Wilson, & Hennegan, 2021; Holmes et al., 2021).

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There is a significant association between dysmenorrhea's severity and its impact on a young person's daily life (Armour et al., 2020). Period pain can have a negative impact on everyday tasks and experiences (Kannan, Chapple, Miller, Claydon, & Baxter, 2015; Schoep, Nieboer, Van der Zanden, Braat, & Nap, 2019) including education. When untreated, dysmenorrhea can interfere with educational performance and engagement (Armour et al., 2019) and lead to absence from educational, sporting, extra-curricular and workplace activities (Armour et al., 2019). Even when individuals can tolerate menstrual pain and attend school, they report that they under-perform as a result of poor concentration, due to physical and mental health issues, including depression and psychological stresses associated with their menstrual cycle (Ameade, Amalba, & Mohammed, 2018; Chia et al., 2013; Yesuf, Eshete, & Sisay, 2018; Yu, Han, & Nam, 2017). Thus, young women may be disadvantaged in school and, by extension, in terms of life opportunity due to the impact of dysmenorrhea (Armour et al., 2019; Armour et al., 2020).

According to the National Women's Health Policy of Australia (Department of Health, 2018), sexual and reproductive health is a critical issue. Yet, research findings show that young people often do not seek medical advice for their menstrual symptoms but rely on information from the internet and frequently engage in self-managed medication for pain relief (Armour et al., 2021). Such findings point to the fact that a national education curriculum that provides quality health education is vital to ensure young people have the knowledge and health literacy skills to make informed decisions about their health and well-being.

Our teams recent research has found that menstrual health literacy is low worldwide, across a wide range of geographic, economic or cultural factors (Holmes et al., 2021). Similar issues occur amongst Australian adolescents and young people with many unable to identify symptoms of an 'abnormal' menstrual cycle, and more concerning, even if they thought these were abnormal many would not seek medical advice (Armour et al., 2021). Low levels of health literacy are associated with overall poorer health status, less adherence to correct medication protocols and less use of preventative health care (Nielsen-Bohlman, 2004). Poor menstrual health literacy and lack of education about pain management may be a key factor in young people often using suboptimal choices of analgesics and/or non-pharmacological remedies including traditional and folk treatments (Armour et al., 2019). While there is some evidence that non-pharmacological self-care such as heat (Armour, et al., 2019) and exercise (Armour et al., 2019) can be effective, many young women report using other, less proven methods such as consuming hot drinks (Rani, Sharma, & Singh, 2016; Armour et al., 2019). Sound health literacy is critical to enable young women to manage their dysmenorrhea more effectively.

Our team has previously published quantitative data from our cross-sectional survey on young Australian women's experiences of menstruation and dysmenorrhea, the knowledge they have about the phenomenon, the self-care strategies they employed and the effects on daily life (Armour, Parry, Al-Dabbas et al., 2019; Armour et al., 2020, 2021). These findings provided insights into the limitations of menstrual health education experienced by some participants in Australian schools. This paper presents the results of some of the open-ended qualitative questions included in this larger study. However, before embarking on the research methods and findings, it is critical to frame the discussion in relation to health literacy in education.

## Health literacy

Health literacy relates to how people access, understand and use health information in ways that benefit their health and well-being. People with low health literacy are at higher risk of worse health outcomes and poorer health behaviours. The Institute of Medicine defines health literacy as ‘the degree to which individuals have the capacity to obtain, process, and understand basic health-related decisions’ (Institute of Medicine (US) Committee on Health Literacy, 2004). Additionally, the United Nations Economic and Social Council (ECOSOC) Ministerial Declaration on Health Literacy of 2009 acknowledges the powerful nature of knowledge and understanding in health promotion. This declaration provides a mandate for health literacy, stressing ‘health literacy is an important factor in ensuring significant health outcomes and in this regard, call for the development of appropriate action plans to promote health literacy’ (World Health Organization [WHO], 2015).

Nutbeam’s (2000) Health Outcome Model provides a useful structure from which to examine the health literacy of young people. The model starts with positioning health literacy as a significant product of health education and claims that health literacy is accomplished following the sequential acquisition of three fundamental skills. These include functional skills, such as investigating and applying information to a health-related inquiry; interactive skills which require greater knowledge and comprehension to enable an individual to autonomously work through a health concern and associated conditions; and a critical dimension which requires an individual to be able to critically review health information from various sources and to take subsequent action to promote health and well-being.

The progression from functional to critical health literacy skills aligns with the trajectory of cognitive and social development of adolescents.

## The Australian health and physical education curriculum and teaching menstrual health literacy

In Australia, educational content related to menstruation is indirectly incorporated in the Australian Health and Physical Education (HPE) curriculum (Australian Curriculum and Assessment Authority, ACARA, n.d.). Within HPE, the sub-strand of ‘Being healthy, safe and active’, addresses the focus area of ‘relationships and sexuality’. This focus area deals with the physical, social and emotional changes that occur over time during adolescence and how these influence gender and sexual identities. Theoretically, the content covered within this area enables students to develop knowledge, understanding and skills to navigate puberty, including menstruation, in a safe and healthy manner. However, it does not directly mandate to teach menstrual health, therefore it may not be specifically taught and if it is the knowledge by the teacher may be limited (Duffy, Fotinatos, Smith, & Burke, 2013). Effective teaching about menstrual health could be achieved through the incorporation of the three dimensions of the health literacy framework: functional, interactive and critical (Nutbeam, 2000).

Consistent with a strengths-based approach, health literacy is a personal and community asset to be developed, evaluated, enriched, and communicated (ACARA, n.d.). Schools are useful sites for the dissemination of knowledge about sexual health including

menstruation, because children spend large amounts of time in school and are essentially a captive audience. Furthermore, many young people consider school as a trusted source of information (Johnson et al., 2016). HPE teachers, thus, have an opportunity to play a vital role in the education and development of students' health literacy in the area of menstrual health. As such, an understanding of health literacy or more specifically, menstrual health literacy and how it impacts on menstrual health and menstrual management is central for supporting students and improving health outcomes through a critical literacy approach.

In Australia, however, many teachers lack training and confidence to facilitate contemporary relationships and sexuality education (Duffy et al., 2013). In primary schools, teachers reported a tendency to outsource puberty education, less than half of the female teachers in a study by Roux and colleagues felt very confident in teaching about menstruation (Roux, Burns, Chih, & Hendriks, 2019). In primary and secondary schools, a lack of confidence in delivering Relationship and Sexuality Education programmes has been noted in teachers (Roux et al., 2019). Despite the importance accorded to menstruation in young people's lives, and despite its place in curriculum and pedagogy, there has been little research to understand young people's educational experiences about the topic of menstrual health literacy in Australian schools.

## **Menstrual health education**

Knowledge of young people's perceptions of the menstrual health education they receive/d in schools is an important starting point for developing educational strategies and approaches that support their understanding and experiences of menstruation and dysmenorrhea. In Australia, Health and Physical Education (HPE) teachers are pivotal in providing critical, evidence-based information. To what extent this is occurring in school education is an unknown quantum. Roux et al.'s (2019) research trialling a school-based ovulatory-menstrual health literacy program for adolescent girls showed inadequate health literacy skills. This is echoed in other studies that have addressed menstrual health amongst young women (Armour et al., 2021; Bellis, Downing, & Ashton, 2006; Li et al., 2020). Other research suggests, teachers construct menstruation as a problematic topic in some instances, and position it as a shameful burden that needs to be concealed (Agnew & Gunn, 2019; DeMaria et al., 2020). Education in this area often focuses on biological processes or assumes a scientific perspective (DeMaria et al., 2020; Gupta et al., 2018). More pointedly, Australian teachers have expressed discomfort in teaching about puberty, with more than 34% of female teachers and 83% of male teachers in one study saying they did not feel confident addressing the topic of menstruation (Duffy et al., 2013). A considerable number of high school HPE teachers are male and may find this topic challenging to teach. The complexities and uncomfortableness of the topic appear to have an influence on the topic not being taught at all, with some teachers avoiding it altogether. This is the result of not having a good understanding of the topic beyond the biological and there being little to no professional development to upskill teachers. It is this combination of factors that challenge curriculum implementation of menstrual health education.

## Research methodology

A questionnaire was employed to obtain quantitative and qualitative data from a large sample of adolescents and young people under 25, Australia wide. The 59-item online questionnaire was developed by a research team that included experts in menstrual health, education and health promotion. Details on the development of the questionnaire are provided in our previous publications on the quantitative results that have been previously published (Armour et al., 2019; Armour et al., 2020).

The instrument also included three open-ended qualitative questions, designed to provide a broader understanding of the respondents' perspectives on their menstrual health education. This paper however reports on the analysis of the data in the open-ended question: 'What was the most useful information you got in your HPE class about menstruation?' in order to better understand school-based curriculum and menstrual health education in Australian schools.

## Recruitment

The study was approved by the Western Sydney University Human Research Ethics Committee, approval number H12411 (approved 24th November 2017). Adolescents and young women aged 13–25, who had experienced their first menstrual period, were recruited via Facebook and Twitter, through paid Facebook advertising and the personal social media networks of the research team. Other organisations such as Family Planning NSW, Australian Council of Health, Physical Education & Recreation (ACHPER) NSW and U by Kotex (Kimberly Clark) also distributed the invitation to participate via their social media channels or membership email base. Participants were given the link for the participant information sheet and survey or provided with a hard copy if requested. Informed consent was obtained prior to survey completion.

## Analysis

A thematic analysis of the data was undertaken reflecting the approach by Braun and Clarke (2006), which allows for the identification, analysis and interpretation of meaning (themes) within qualitative data (Clarke & Braun, 2017). A bottom-up approach was utilised (Castleberry & Nolen, 2018), wherein the actual data paved the way for identification of themes rather than the specific research questions or theory. In the first stage, the data was coded by reading the data subsets, making notes and testing preliminary codes. This coding process involved three researchers from the broader research team, who reviewed and revised the coding process. Following this, semantic themes (Castleberry & Nolen, 2018) were developed from the coded data to identify the participants' explicit experiences and convey their concerns.

## Results

Participants who responded to the survey came from a range of backgrounds and experiences. Demographic information illustrates that 48.4% of respondents were at school (year 6–12), while 35.6% were undertaking tertiary education and the remaining 16%

were not currently at school or in further education. The median age of the sample was 17 years (16–19 years) with the majority of the respondents (51%) aged between 16–18 years old. Fourteen percent of the respondents spoke a language other than English at home. Just over a third of the respondents (37%) lived in areas in the bottom five socioeconomic status (SES) deciles with 16% of respondents living in the highest SES decile.

An overarching theme emerging from the data related to the participants perceived shortcomings in their education, which clustered around three sub-themes. These included:

- (i) It's all just biology – which exemplified how the respondents' education focussed mainly on the biology of menstruation but provided very little practical advice;
- (ii) the cause but not the effect – which illustrated how concerns about their menstruation were not adequately addressed during their HPE classes; and,
- (iii) too little, too late – which demonstrated how the information participants received about menstruation was often overdue, and provided well after puberty had arrived.

It is important to note that of the 2692 participants (53.8%) who responded to the open-ended question, 187 (6.9%) reported that either 'no information' about menstruation was provided to them during their schooling or they were 'unsure' about whether any information was provided at all. Moreover, approximately 14% of the respondents felt that they did not learn anything that they perceived to be useful or what they did learn was very limited in its nature as will be described below. As Armour and colleagues point out, the lack of useful knowledge on menstruation can have far reaching consequences on pain management, recognition of problematic menstrual symptoms, and accessing necessary support (Armour et al., 2019). Additionally, it is noteworthy that many participants responded in similar ways, illustrating that there is some consistency in the lack of focus on this issue in schools across Australia.

### *It's all just biology*

The responses indicate that schools generally undertake a biological approach to teaching menstrual health which is reinforced by the HPE curriculum. Currently, the HPE syllabus does not address menstrual health literacy except in the later years where it is linked to sexual and reproductive health through delivery of the focus areas 'Relationships and Sexuality' with content covering resources and strategies to manage personal, physical and social changes and transitions associated with puberty (ACARA, n.d.). A biological approach in health classes is typically implemented at the expense of more nuanced understandings of physical maturation, emotional development, and relational experiences (Romeo & Kelley, 2009). In the findings reported in this article, the shortcomings of focusing on the body's anatomy and function as the basis for learning and teaching was highlighted by the responses of the participants. They described how curriculum content provided details of the biological processes involved in menstruation such as hormonal changes, egg development, and changes in the body. However, as the quotes below illustrate, this information provided little practical application for those experiencing related pain or even how to address the everyday necessities of menstruation.

Nothing, was all about the technical side of what happens and why for grade 5, 6 and 7 sex ed. Nothing about how to cope and deal with pain or about female reproductive disorders. It never explained what periods are supposed to look like or what is normal and what isn't. I can name all the different parts of my reproductive organs. (17 years of age, not at school or in further education, New South Wales)

There was no practical information focused on pain management related to menstrual management, such as relieving symptoms and the use of sanitary items, only the biological effect on the body such as how hormones come into play. Personally, that was not useful and I can't remember much about it. (16 years of age, Year 11, Victoria)

None of the information was particularly useful, despite being interesting. We mostly covered the biology behind it, rather than any practical knowledge. In particular, no advice was given on dealing with pain (mine ended up being extreme) or what the process (if any) was at school for having menstrual pain taken seriously and treated as a consideration in test writing or sport class. We were not taught about conditions such as endometriosis, and menstrual products received only the briefest passing mention from an embarrassed PE teacher. On the whole, we were left to make our own way. (18 years of age, University student, Western Australia)

Applying a biological approach enables teachers to focus on functional aspects of the body, rather than exploring the messiness, nuances, discomfort, and individuality that encompass the reality of menstruation. Menstruation, because it is integral to reproduction, also means that it is integral to sex. It is also connected to genitalia. According to Lahme et al., discussion about both sex acts and genitalia are considered difficult (if not taboo) topics to address with young people and many adults, and even teachers feel embarrassed or unprepared to broach these topics (Lahme, Stern, & Cooper, 2018). Although health literacy is about an individual's ability to access and understand information about health and well-being (ACARA, n.d.), thus it is little wonder that respondents felt their education was inadequate. A focus on biological aspects of menstruation provides a clinical, impersonal and disembodied overview of what is, in fact, a very bodily experience. Moreover, these students' responses indicate that they were not provided with adequate support to manage menstruation.

### ***The cause but not the effect***

The common discourse perpetuated in classrooms constructs menstruation as largely unproblematic, where issues related to dysmenorrhea and other forms of menstrual concern are not broached, even though experiencing a painful period is common in young people (Grandi et al., 2012). As reported by participants, school-based information largely avoided topics related to discomfort and pain.

Health classes should do more to teach what isn't always normal to do with menstruation and vaginal health because I had many issues, I had to work through to overcome these problems that I was unaware of at the time, such [as] needing a Hymenectomy and being diagnosed with PCOS [polycystic ovarian syndrome]. It made me feel very alone. (17 years of age, School student, Year 12, Western Australia)

Just what made it happen not how it affected [*sic*] females which I would have liked. I had awful pain from a young age that my friends couldn't relate to. (21 years if age, University student, New South Wales)



I think the information given was quite vague. I initially went to a private same-sex school. Sexual health was regularly discussed in HPE class for a whole semester in year 8. But the focus was mainly on sexual health and safe sex practices, not menstruation cycles or any irregularities that may occur - nor any honest discussions about what to expect during menstruation. (24 years of age, Not at school or in further education, New South Wales)

To be really honest, none was overly useful. Sure I learned why and how anatomically my periods occur, but dealing with the bleeding and pain and hormones was something that rarely came up and in fact was of high importance to me (I have endometriosis, diagnosed via laparoscopy only early this year). (17 years of age, School student, Year 12, South Australia)

We did not learn about hormones, possible complications (dysmenorrhea, endometriosis, etc.), what the baseline of a normal period was like. I assumed the pain, vomiting, and general unpleasantness caused by my endometriosis was normal. (24 years of age, University student, Queensland)

They always stressed that you didn't bleed as much as you thought (teaspoon) and I always felt as though they were playing down how significant it would be/is in a woman's life. (23 years of age, Not at school or in further education, New South Wales)

In addition to feeling that the curriculum failed to meet the needs of these participants, some responses illustrated that a lack of engagement with their personal experiences simultaneously left them feeling isolated, vulnerable, and resigned to pain. Comments from respondents who experienced difficult menstruation such as, 'It made me feel very alone', 'my friends couldn't relate' and 'general unpleasantness ... was normal' demonstrate the alienation of these young people and highlight the mismatch between what was happening in the classroom, their body, and their emotional experiences. Additionally, the lack of detail about expectations around menstruation and dysmenorrhea and the associated inadequacy in providing a realistic understanding of the physical and variable manifestations of the phenomenon, demonstrated a failure in the system and/or the approach taken by the school and /or particular teachers to provide comprehensive health care education. This can be viewed as a missed opportunity, considering the fact that young people can acquire considerable health knowledge from the schooling environment.

### ***Too little, too late***

The curriculum location of menstruation information was also identified as problematic. Menstruation falls within the personal, social and community health content descriptors within the Australian Foundation to Year 10 HPE Curriculum. Specifically, the broader areas consist of evaluating strategies to manage physical, social, and emotional changes; practising and applying strategies to seek help for themselves or others; investigating and selecting strategies to promote health; and evaluating health information. Albeit there is not a specific focus on menstrual health education in the curriculum text, it is implicit within the relationships and sexuality focus area at appropriate intervals across the continuum of learning from Year 3 to Year 10. For instance, the curriculum addresses physical, social, and emotional changes including how the body changes as people grow from Foundation to year 2. From Year 3–10 the syllabus addresses puberty and how the body changes over time. Specifically, Years 5/6 and 7/8 focus on puberty and physical changes while Years 9/10 focus on sexuality and sexual health. Therefore, menstrual education

can be taught early on in school education, made possible recently by changes in the curriculum. However, the content of lessons is at the discretion of the classroom teacher who may not engage in anything more than a biological focus.

Despite the opportunity to explore menstrual health in the curriculum from Year 3, some participants reported their exposure to menstrual health in the classroom did not occur until much later. This late exposure to menstrual health education is problematic. Research from the UK illustrates that the onset of menarche in western countries typically occurs around 12 years of age (School Year 6/7), but about 2–3% of girls have their first period at age 10 (School Year 4/5) (Lewis, 2018). Bellis et al. (2006) and Yu, Choe, Yun, and Son (2020), showed that the age of menarche had dropped by three years in Europe during the past century. Thus, earlier education in the area is critical. These issues of a delayed menstrual health education were reflected in respondents' comments:

Nothing was really helpful due to the fact of learning the information too late. Learning about growth and development should happen in primary school, not year 8/9. (15 years of age, School student, Year 10, South Australia)

We were 14, so most girls had already had a period. (24 years of age, University student, Queensland)

Almost nothing was useful because by the time we discussed menstruation in grade 5, I had already gotten my first period ... We never learnt about very generalized symptoms and pain until year 9 at high school (all girls). (16 years of age, School student, Year 10, Victoria)

I found out most information myself using the internet. I only got two 80-minute lessons on this topic in year 7 and it was very basic and taught us about our reproductive systems and what happens to them when we go through puberty. I already knew all this stuff anyway. (14 years of age, School student, Year 9, New South Wales)

As these quotes demonstrate, responding to the needs of young people experiencing menstruation should be undertaken much earlier in a child's education. Despite menarche being a fairly typical event for females, leaving education until a later age/stage of development is inadequate. It can be surmised that discourses related to the social construction of childhood may have some bearing here. That is, adults position children/youth in binary opposition to themselves. As such, children are situated in discourses that position them as innocent, vulnerable, unknowing, and in need of protection from the adult world (Robinson, Smith, & Davies, 2017), even though young people are very aware of many things that adults consider inappropriate knowledge for them, through information sharing among friends and via social and other forms of media.

## Discussion

By improving people's access to health information and their capacity to understand and use it effectively, health literacy is critical to empowerment. Sex and sexuality in western contexts, as detailed above, is typically on the list of topics commonly perceived as inappropriate for children. Menstruation, as a component of reproduction, and thus being related to sex, is therefore perceived as problematic; it is an embarrassing and difficult issue for many parents (and teachers) to discuss with children/youth (Ollis, Harrison, & Richardson, 2012) and adults often seek to 'protect' children from such information

because it broaches ‘adult concepts’. In addition, what is deemed appropriate knowledge is impacted by, among other things, religious and cultural beliefs (Ollis et al., 2012). Hence, educating broadly for the relative minority who reach menarche at a younger age may be seen as providing information that is ‘too adult’ for others in the class, where physical and emotional maturity and the apparent ability to ‘cope’ with such information is uneven across students. However, omission at these early stages is problematic as it fails to provide the necessary information and support for those young people who may need it most.

Enhancing health literacy skills to support menstrual health education is vital. Lack of effective menstrual education impedes menstrual health literacy among younger women, including the normalising pain, and can lead to poorly managed pain relief. Poorly managed menstrual disorders can and do impact attendance, academic performance, participation in sport and extra-curricular activity, therefore affecting educational outcomes and general well-being (Armour et al., 2019). This research highlights that there are gaps in how and when menstrual education is taught which may have both short and long-term ramifications for young women, and potentially result in a critical diagnostic delay and treatment of menstrual health disorders.

Through including and developing the three dimensions of health literacy through HPE, young people can become more empowered and better skilled to take control of their own health. Classroom strategies could include recognising and processing information, discussing ideas, brainstorming, developing concept maps, highlighting terms and key ideas, undertaking critical assessment of the authenticity and reliability of information, and exploring health inequities and possible solutions.

Curriculum expectations need to be clearly outlined to ensure teachers are providing a holistic approach to menstrual health education beyond the clinical nature of the biological approach. In essence, HPE teachers need to address inaccurate norms about menstruation, and provide appropriate advice about dysmenorrhea and menstrual management including pain management and when to seek medical advice. Further, to cultivate students’ menstrual health literacy in line with Nutbeam’s (2000) critical dimension, the HPE curriculum requires the provision of menstrual health education that develops young people’s skills in selectively accessing and critically analysing relevant menstruation-related information to take action to promote health and wellbeing. HPE teachers play a pivotal role in providing access to information and resources. This approach will enhance students’ ability to take greater responsibility for their menstrual health, including raising awareness of avenues for the potential relief of problematic menstrual symptoms such as dysmenorrhea. The outcomes could be highly beneficial, enabling young women to engage more fully, and with greater consistency, in both classroom-related and extra-curricular activities.

Additional professional learning to prepare teachers to teach menstrual health education. In some Australian states and territories, the health curriculum is taught by generalist primary school teachers who lack expertise in this area. Not having specialist HPE teachers in primary schools exacerbates the possibility of menstrual health education not being addressed or addressed poorly. Additionally, the extent to which accredited HPE teachers teach menstrual health relies on their decision to include it, and their knowledge, experiences and beliefs. Professional learning provisions, thus, would ensure that approaches to menstrual health education consider broader areas beyond the biological.

Professional learning would ensure that HPE teachers have appropriate knowledge, understanding and by extension, confidence, to provide menstrual health education from a holistic perspective that is introduced at age-appropriate levels. A holistic approach to menstrual health education could also include self-care options such as guidance on how to use heat effectively, and information on the usage of over-the-counter medications, such as ibuprofen, and a range of medium to long term self-care options including, acupressure points, a yoga sequence (Yoga Nidra) and dietary guidance (Armour et al., 2019; Jeon, Cha, & Sok, 2014). Professional learning would be beneficial for male HPE teachers who generally do not have personal experience with menstruation.

Increasing engagement with health providers such as Family Planning and other health networks, could ensure that schools have the resources and information required to up-skill teachers and the broader school community; this would help to ensure that young women are not left to suffer unnecessarily. This proactive approach would improve the educational outcomes of students and provide the necessary support for young people to manage symptoms or pain associated with both menstruation and menstrual health disorders. Forging these connections with health care providers would also support young women to gain access to relevant health services, thus developing their health literacy, empowering them in ways that promote and maintain health and wellbeing.

## Conclusion

Menstrual health education is required to be taught as part of the HPE curriculum. This paper confirms the need for the topic to be taught and the support that teachers need to ensure they can teach it effectively. This has implications for current teachers and teacher education and highlights the need for an effective professional development program. To ensure the translation to curriculum practice, further advocacy is required so young people have the knowledge and skills to support their menstrual health and teachers feel well-equipped and confident to teach menstrual health education.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Notes on contributors

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*M. Sherry* is an educator with a Masters of Secondary Teaching from Western Sydney University. Currently, she is working towards a Master of Philosophy qualification from the Queensland University of Technology and her research topic is focused on refugee education.

*Dr Mike Armour* is a Senior Research Fellow in Reproductive Health. His research has a strong focus on pelvic pain and endometriosis, and he is interested in improving menstrual health literacy to help reduce the impact of dysmenorrhea on people's lives.

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