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Australian nursing and midwifery student beliefs and attitudes about domestic violence: A multi-site, cross-sectional study

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ABSTRACT

Nurses and midwives have a professional responsibility to identify and provide effective care to those experiencing domestic violence. Pre-registration preparation may develop this capability. In order to inform curriculum development, this study explored Australian nursing and midwifery students' attitudes and beliefs about domestic violence. Data were collected between June and October 2017. Descriptive statistics were calculated and comparative analysis performed on independent variables. Thematic analysis was performed on open-ended qualitative responses. Participants included 1076 students from nine Australian universities. The majority were enrolled in nursing programs (88.4%), followed by midwifery (8.6%), and combined nursing/midwifery (2.4%) programs. There was no statistically significant difference in scores by year level across all subscales, suggesting there was no developmental change in beliefs and attitudes toward domestic violence over the course of study. Nursing students held views that were more violence-tolerant than midwifery students. Australian and Chinese-born males were more likely to refute that domestic violence is more common against women. Students had a limited understanding of domestic violence suggesting a critical need to address undergraduate nursing and midwifery curricula.

1. Introduction

Domestic violence (DV) is a global issue that is detrimental to the health and wellbeing of those affected. For the purpose of this study, DV is defined as interpersonal violence between people where there is, or has been, an intimate relationship and includes physical, sexual, emotional, economic, spiritual or psychological violence (Doran and Hutchinson, 2016; Morgan and McAtamney, 2009). Other commonly employed terms for this violence include 'spouse abuse' or 'intimate partner violence'. The World Health Organization (WHO) acknowledges the term "domestic violence" is used in many countries to encompass violence between intimate partners or other family members, such as child and elder abuse (WHO, 2012).

Reflecting the extent of DV, it is estimated that more than one in three women globally will experience this violence in their adult life. For women who are murdered, 38% of the perpetrators will be an intimate partner or ex-partner (WHO, 2016). While males may also be victims of DV, in heterosexual relationships DV is more frequently men's violence against women (WHO, 2016). Australian data confirms that, women are three times more likely to experience DV compared to men, with rates of sexual intimate partner violence eight times higher in women (ABS, 2016). Importantly, statistics indicate that there is an

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increased risk of exposure to DV in pregnancy, and that if violence is already occurring this tends to escalate in pregnancy or the early postnatal period (Smith et al., 2018).

The WHO's (2016) global plan to address interpersonal violence, and the Australian national plan to target violence against women and children (Department of Social Services, 2016), both highlight the role of health services in increased access to responsive services, rapid detection, and changing attitudes towards violence. The WHO has also published useful guidelines to support health managers to strengthen systems and effectively respond to women's emotional and physical needs (WHO, 2017). Abused women are more likely to seek professional health care than non-abused women, and are more likely to trust, and disclose violence to a health professional (WHO, 2013), supporting targeted DV screening. In Australia, secondary level health initiatives include universal screening or routine enquiry of women in emergency departments and mental health, drug and alcohol and maternity services (Australian Insitute of Health and Welfare, 2018a,b; WHO, 2013). In the Australian state of New South Wales (NSW), close to one third of all women screened report DV (NSW Health, 2015). There is no clear evidence on the benefits of universal routine screening versus case-based screening (Spangaro et al., 2009, 2011). However, the prevalence, significance and consequences of DV warrant that health professionals identify and respond appropriately.

Health professionals' knowledge of, and attitudes towards DV affect their capacity to provide meaningful care to those affected (Baig et al., 2006; Lutgendorf et al., 2010). Registered nurse and midwife standards incorporate advocating for, and responding to women, including those experiencing DV (Nursing and Midwifery Board of Australia, 2018, 2016; Royal College of Nursing, 2000). Given nursing and midwifery students are future health professionals, understanding how their knowledge and attitudes towards DV are shaped during undergraduate education is important. International literature indicates that nursing and midwifery students' attitudes towards DV are extremely variable. Studies have identified that students understand the causes, complexity and manifestations of DV abuse (Bradbury-Jones and Broadhurst, 2015; Häggblom, 2013) and can hold woman-centred attitudes, such as acknowledging that women stay in violent relationships as a survival mechanism (Häggblom, 2013). Others have reported gendered stereotypes among students that normalise violence, such as students not considering forced sex in a relationship as DV (Doran and Hutchinson, 2016) and depicting offenders as drug or alcohol dependent, or from a minority group (Beccaria et al., 2013; Gorman et al., 2016; Rigol-Cuadra et al., 2015).

The extent to which students encounter people experiencing DV during their clinical placements varies. In one study, midwifery students were more likely to report exposure, while nursing students believed they were not commonly placed in situations in which DV was identified (Bradbury-Jones and Broadhurst, 2015). Others have reported that nursing students are unaware of, and commonly miss, DV indicators (Bryant and Benson, 2015; Rigol-Cuadra et al., 2015), or do not feel it is their role to enquire about DV (Rigol-Cuadra et al., 2015). Where DV screening is mandatory, students report that, they would only screen a woman if she demonstrated indicators of DV (Gerber and Tan, 2009). This position reflects the broader debate on whether screening should be universal or cased-based (O'Doherty et al., 2015; Spangaro et al., 2009, 2011).

Overwhelmingly, nursing and midwifery students report feeling unprepared to assess and manage DV disclosures (Beccaria et al., 2013). This lack of preparedeness is reported to stem from knowledge gaps (Bradbury-Jones and Broadhurst, 2015; Connor et al., 2013), perceptions of a lack of time, and fear of making the situation worse (Gorman et al., 2016; Rigol-Cuadra et al., 2015). Educational preparation using simulation scenarios, case studies and encouragement of critical thinking has increased student confidence to manage DV disclosures (Bryant and Benson, 2015; Häggblom, 2013). Additionally, supportive clinical mentors who demonstrate positive attitudes towards DV screening have been shown to be beneficial to learning (Ben Natan, Khater, Ighbariyea & Herbet, 2016; Bradbury-Jones and Broadhurst, 2015).

Pre-registration courses are well positioned to develop students' capabilities to fulfil their professional responsibility (Doran and Hutchinson, 2016). To address students' assumptions and stereotypes about DV requires a change in knowledge, skills, and attitudes. Preparation early in the curriculum provides opportunities to scaffold development throughout the course, and to promote sustainable change in attitudes towards DV. Importantly, not preparing students to inquire about and respond to DV disclosures, has an ongoing impact which may carry into inadequate responses in the clinical setting following registration (Taylor et al., 2013).

To date, most studies exploring undergraduate health student's attitudes and knowledge towards DV has been conducted primarily in one institution with small samples. Little research has been undertaken in Australia, and there is scant evidence exploring both nursing and midwifery students. Given the variety of student attitudes and reported lack of preparedness to assess and respond to DV disclosures, we undertook a multi-site study of Australian undergraduate nursing and midwifery students. The objectives of the study were to: (i) Describe and compare students' self-reported attitudes and beliefs about DV (quantitative and qualitative); and (ii), Compare results across programme years.

2. Methods

2.1. Design and setting

A multi-site, cross-sectional online survey involving students of Australian undergraduate Bachelor degree programs in nursing, midwifery or combined nursing/midwifery programs.

2.1.1. Recruitment and data collection

Fourteen universities were invited to participate, with nine agreeing. The participating universities had campuses in six of eight Australian states and territories (Queensland, New South Wales, Western Australia, Victoria, South Australia and Tasmania). Employing convenience sampling, all students enrolled in undergraduate nursing, midwifery or nursing/midwifery programs at the participating universities were invited to participate via email. The invitation included an information sheet explaining the study, assuring students that participation was voluntary and anonymous, and included a link to a consent sheet and the online survey. The survey was hosted on the Qualtrics platform on a secure University server and was open from June to October 2017. Two email reminders were sent.

2.1.2. Sample size

The estimated population of students at participating universities was 6,000. Employing Krejcie and Morgan's (1970) sample size calculation (X 2NP (1-P)/d2 (N-1) + X2P (1-P)) with a 95% confidence level and alpha of 0.05, the minimum required sample size was 361 students.

2.2. The survey instrument

The survey incorporated: i) demographic items, ii) a modified version of the Inventory on Beliefs and Attitudes towards Domestic Violence (Hutchinson and Doran, 2017), and iii) an opportunity to provide further comments in one open ended question. In addition, information was collected on curricula content and learning opportunities on the topic of DV, and student perceptions about this learning. We have reported this aspect of the study elsewhere (under review).

Demographic information on gender, age, degree, year of program, country of birth and First Peoples identification was collected. The Beliefs and Attitudes towards Domestic Violence scale consisted of 22 five-point Likert scale items (strongly agree to strongly disagree).

Table 1
Revised scale factor structure and reliability.

Subscales	Item loading	Cronbach's Alpha
Nursing, midwifery and domestic violence	.809–.834	.792
Myths about victims and perpetrators	.847–.884	.812
Power, gender and domestic violence	.517–.728	.781
Justifying and excusing domestic violence	.509–.715	.712
Children and domestic violence	.752–850	.848
Forms of violence	.805–951	.976

Seventeen items were from the Inventory on Beliefs and Attitudes towards Domestic Violence originally designed and validated with Australian nursing students, which has an established factor structure and reliability (Doran and Hutchinson, 2016; Hutchinson and Doran, 2017). Five additional items relating to women and children that performed poorly in the original scale development (Doran and Hutchinson, 2016) were further refined an included, with adjustment to the wording of a number of items to include midwifery. To confirm the factor structure, exploratory factor analysis (EFA) employing principal component analysis (PCA) with Varimax rotation and Kaiser Normalisation was performed. Items not retained were those with communalities < 4.0, cross-loadings with another item < 0.20, and a factor loading below 0.50. Following removal of unsatisfactory items, the final EFA result provided a six-factor structure with a Bartlett's Test of Sphericity (p = 0.001). Item loading was satisfactory, with tolerable cross-loading on a small number of items on two factors, as indicated in Table 1. On the factor subscales, mean scores closer to the minimum possible score range indicate on average respondents tended to disagree more with violence-tolerant view views toward DV and held more favourable attitudes, beliefs and knowledge about DV. The inventory subscales measured perceptions about:

- Forms of DV (4 items): e.g., "If a partner yells abuse this is a form of DV"
- Views on nursing, midwifery and DV (3 items), including their roles in identifying and responding to DV, e.g., "Nurses have an important role in providing emotional and practical support to women who experience DV"
- Children and DV (3 items): e.g., "Exposure to DV is a form of abuse".
- Myths about DV (4 items): e.g., "DV is a private matter to be handled in the family"
- Characteristics of the abuser and abused (6 items): For example, "Most abusers in DV are from lower income groups"
- Power and responsibility (2 items), (ie. the use and nature of power in DV), e.g., "DV can be excused if it results from people getting so angry that they lose control."

2.3. Ethical considerations

The study was formally approved by the following Human Research Ethics Committees: Southern Cross University (ECN-17-009), Curtin University (ECN-17-009), Griffith University (GU2017/298), University of Newcastle (H-2017-0126), Flinders University (7628), University of Tasmania (H0016628), and Central Queensland University (H17/04–059). Approval without a formal ethics number was granted from two universities, given participation was as collaborators, not co-investigators. Participation in the study was anonymous, voluntary and low risk. The survey did not ask about personal experiences of DV. However, to address any potential distress for participants, particularly those who may have had a personal DV history, the information sheet provided the contacts of local support services.

2.4. Data analysis

Descriptive statistics (mean (M), standard deviation (SD), and frequency were calculated on demographic and scale items. To test for differences between groups, t-tests, Chi Square and multivariate analysis of variance (MANOVA) with Bonferroni adjusted alpha to control for Type 1 error were performed using SPSS version 23 (IBM SPSS, Armonk, NY). Preliminary testing for assumptions was undertaken to check for homogeneity of variance-covariance, outliers, and multicollinearity. Where Levene's test for equality of error variances was violated, an alpha of .025 was employed to interpret significance (Tabachnick and Fidell, 2013). For all other analyses p values of < 0.05 were considered statistically significant.

Open-ended responses were analysed thematically via a six-step method (Clarke and Braun, 2013). The steps included: familiarisation with the data; using a systematic process to generate initial codes and collate relevant data; examining the relationships between codes in order to collate them thematically; reviewing this categorisation in relation to the entire dataset; providing a name that reflects the content; and reporting using illustrative quotes.

3. Results

3.1. Demographic characteristics

There were 1076 survey respondents from six Australian states. As shown in Table 2, the majority were enrolled in nursing programs (88.4%, n = 951), followed by midwifery (8.6%, n = 93) and nursing/midwifery programs (2.4%, n = 26). All midwifery students (100%, n = 93), and most nursing (90.4%, n = 855) and nursing/midwifery respondents (96.2%, n = 25) were female. Forty-five percent were in first year and in the 17–23-year age range.

3.2. Student beliefs and attitudes towards DV

The responses on the Beliefs and Attitudes Towards DV subscales are summarised in Table 3. Respondent scores indicated violence-tolerant views in the following two subscales:

- 'Power and gender'; 32.6% (n = 350) of the sample had score means > 12. The items *Women who perpetrate DV do so in self-*

Table 2
Respondent characteristics.

n = 1076		%
Gender		
Male	95	8.8
Female	975	90.6
Not recorded	6	0.6
Course		
Nursing	951	88.4
Midwifery	93	8.6
Combined	26	2.4
Not recorded	6	0.6
Year of program		
First	485	45.0
Second	324	30.1
Third	230	21.4
Other	34	3.2
Not recorded	3	0.3
Age in years		
< 23	484	45.0
24–29	215	20.0
30–35	121	11.2
36–41	93	8.6
42–47	76	7.1
48 + -	78	7.3
Not recorded	9	0.8

Table 3
Summary scores for beliefs and attitudes towards domestic violence.

Subscales	Range	Mean	S.D.	Min.	Max.
Forms of DV	49.7	14.3	8.0	10.0	50.0
Justifying & excusing DV	59.4	11.0	3.0	6.0	24.0
Power, gender & DV	74.8	10.7	2.17	5.0	17.0
Myths about victims & perpetrators	55.1	8.16	2.17	3.0	15.0
Views on nursing, midwifery & DV	71.7	4.37	1.67	3.0	15.0
Children & DV	90.0	5.2	1.7	4.0	20.0

DV = domestic violence.

defence or retaliation (M 2.7 ± 0.89); *Most women who are abused are from low income groups* (M 2.9 ± 0.93); *Abusers in DV are from low income groups* (M 2.7 ± 0.98); and *Most women can leave a violent relationship if they want* (M 2.5 ± 0.1.07), demonstrated higher levels of disagreement.

- 'Myths about victims and perpetrators'; 26.1% (n = 280) had score means > 10. The items *The majority of perpetrators of DV are men* (M 3.6 ± 0.96) and *One of the causes of DV is the power imbalance between men and women* (M 2.4 ± 1.03) demonstrated higher levels of disagreement.

3.3. Comparative analysis

MANOVA was used to test differences across independent variables for scores on the six-factor attitudinal DV subscales:

- *Year of program:* Across the subscales there was no significant difference in scores by year (Table 4). Dual degree students in fourth year had the least favourable scores.
- *Program of study*: The variables 'Justify and excuse DV' and 'Myths about DV' were statistically significant using a Bonferroni adjusted alpha level of 0.004, with the partial eta squared 0.031 and 0.006 respectively, indicating a small effect size. Midwifery students' mean scores indicated they were less likely to justify or excuse DV, while students in dual degrees were most likely to. MANOVA was used to further examine the variance between midwifery and dual degree cohorts (Table 5). Significance remained following Bonferroni correction; the large effect size for the factor 'Justify and excuse' (0.206) indicated midwifery students were in less agreement than dual degree students.
- *Gender:* When considered separately, the variable 'Justify and excuse DV' was statistically significant. A partial eta squared of 0.003 indicated a small effect size (Table 6). Male students held more violence-tolerant views on this subscale.

Chi Square analysis for the item *Violence against women is common in our community* for Gender (X^2 (2, N = 1064) = 26.61, p 0.0001) and country of birth (X^2 (18, N = 1064) = 48.07, p 0.0001) confirmed males (52.1%, n = 49) were less likely than females (74.9%, n = 726) to agree that violence is common against women, and males born in Australia (8.5%, n = 71) and China (42.9%, (n = 6) were more likely to disagree with the statement. Analysis by gender for the item *The majority of perpetrators of domestic violence are men* found no difference; 64.5% (n = 625) of female students and 63.8% (n = 60) of male students disagreed with the statement. Chi Square analysis confirmed senior students were more likely to disagree with this item (x^2 (6, (1056) p.049)). The highest level of disagreement was from Midwifery (76.3%, n = 71) and Nursing/Midwifery students (65.4%, n = 17).

Table 5
MANOVA results for differences between Midwifery and Nursing/Midwifery programs and scores on domestic violence attitudinal subscales.

	Main effects					
Program of study	Midwifery M (SD)	Nursing/ Midwifery M (SD)	p	F	Partial ETA^2	Bonferroni adj α (.004)*
Forms of DV	12.5 (5.2)	15.9 (8.4)	.017	5.9	.051	
Children & DV	4.8 (1.6)	5.1 (1.6)	.201	1.5	.014	
Justify & excuse DV	9.3 (2.0)	12.1 (3.3)	.000	28.3	.206	sig
Power, gender & DV	10.6 (1.4)	10.6 (1.3)	.801	.064	.001	*
Myths about DV	7.4 (1.6)	8.5 (1.7)	.002	9.7	.082	sig
Nursing, Midwifery & DV	3.9 (1.3)	4.5 (1.2)	.055	3.7	.033	

* assumptions of equality of variance not violated, Bonferroni adjustment not required.

Table 6
MANOVA results for differences between gender and scores on domestic violence attitudinal subscales.

	Main effects				
Gender	Males M (SD)	Females M (SD)	p	F	Partial ETA^2
Forms of DV*	14.5 (8.2)	12.5 (5.2)	.031	4.6	.005
Children & DV#	5.2 (1.8)	4.8 (1.3)	.017	5.6	.006
Justify & excuse DV#	11.09 (2.9)	9.3 (2.0)	.000	28.2	.028
Power, gender & DV*	10.8 (1.6)	10.7 (1.4)	.093	1.1	.001
Myths about DV#	8.2 (2.1)	7.4 (2.1)	.001	10.7	.011
Nursing & DV#	4.4 (1.7)	3.9 (1.6)	.013	6.1	.006

#Bonferroni adjusted alpha (0.004); * assumptions of equality of variance not violated, Bonferroni adjustment not required.

3.4. Qualitative findings

Of the 1076 survey respondents, 180 (16.7%) provided qualitative responses from which the following themes were derived: DV is never OK, Impacts of DV, Gender socialisation, Misconceptions about DV, Health professionals are underprepared, and Systemic multi-pronged

Table 4
MANOVA results for differences across years of program and scores on domestic violence attitudinal subscales.

	Between subject effects							
Year of Program	1st year M(SD)	2nd year M(SD)	3rd year M(SD)	4th year M (SD)	p	F	Partial ETA^2	Bonferroni adj alpha (.004)*
Forms of DV	14.7 (8.4)	13.7 (7.3)	14.0 (7.5)	17.7 (8.4)	.030	2.986	.009	NS
Children & DV	5.3 (1.9)	5.1 (1.7)	5.10 (1.5)	5.1 (1.6)	.301	1.220	.004	*
Justify & excuse DV	11.0 (2.9)	10.8 (2.8)	10.7 (2.8)	11.9 (4.1)	.135	1.860	.006	
Power, gender & DV	10.7 (1.6)	10.8 (1.6)	10.7 (1.5)	10.8 (1.9)	.963	.095	.000	*
Myths about DV	8.17 (2.1)	8.1 (2.0)	7.9 (2.1)	8.5 (2.7)	.360	1.072	.003	*
Nursing & DV	4.4 (1.6)	4.3 (1.6)	4.3 (1.7)	4.7 (2.2)	.429	.922	.003	

* assumptions of equality of variance not violated, Bonferroni adjustment not required.

solutions are required. The following section illustrates each of these themes:

3.4.1. Domestic violence is never OK

Students felt that DV encompassed physical and psychological abuse. The latter was seen to be less visible and included: '*social exclusion, emotional and psychological manipulation, financial abuse or control, influencing others to form negative regard/incite abuse … preventing child visitation*'. Respondents indicated that '*domestic violence is never OK*'.

3.4.2. Impacts of DV

Respondents reported that DV has adverse consequences not only for directly on those exposed to DV as it creates '*long term psychological damage*' for children who witness it. The invisible nature of psychological abuse meant that '*people seem to be more compassionate when they can SEE the trauma, rather than hearing what happens*'.

3.4.3. Gender socialisation

Domestic violence in Australia was seen as '*a MASSIVE issue*', underpinned by systemic causes such as gender socialisation. For example, '*community standards contribute because in just about every nuance of our western culture, women are commodified*', and DV is a result of '*how we bring up males and females*'.

3.4.4. Misconceptions about DV

Respondents flagged community misconceptions about DV, and their consequences. Typical comments included, '*men can be victims as well*', and '*the statistics are very skewed since men are much more likely not to report the abuse*'. One went so far as to state, '*in most DV cases I have seen the woman in the relationship is the abuser*'. The underreporting of DV by males and community attitudes towards men who experience DV – '*he is told to shrug off physical abuse and just be a man about it … if he is emotionally manipulated … just suck it up*' - were thought to result in a lack of support for male victims, and psychological abuse of males was thought to be more common than is reported.

Another misperception was that '*it is their own fault putting themselves in that situation*' and '*women can leave*'. Respondents commented on the impact of '*victim blaming*', particularly the marginalisation of those affected, and the lack of community awareness of the '*controlling nature of the DV environment*', the manipulation of self-esteem that can render targets helpless, and the lack of ability to support themselves financially if the '*partner prevented them from socialising/earning money*'. Victim blaming led to '*stigma and people feeling ashamed for speaking up*', feeling '*judged and belittled by [hospital] staff*'. One person who had experienced DV commented that '*the stigma that … really bothers me is only "bogans" or … "uneducated citizens experience DV". I felt that people thought I was uneducated for putting up with and getting into such a terrible situation*'.

3.4.5. Health professionals are underprepared

The stigmatisation of those experiencing DV by health professionals led some to conclude that they were underprepared to work with this group, e.g., '*I have had to be treated for injuries caused by DV in hospital and felt judged and belittled by staff*' and '*many health professionals do not know how to help or are reluctant to become involved. This creates further difficulties … and negatively impacts on the care that health professionals provide*'.

3.4.6. Systemic, multi-pronged solutions are needed

Suggested strategies to address DV included '*approaching the situation with a genderless mindset*', recognising that males are also affected by DV, and supporting them in the '*same respectful manner*' as women. Respondents suggested looking for solutions that address systemic root causes in an organised way, for example, '*we need to understand the systemic aspects and move away from perceiving it purely as a personal, individual issue*'. Strategies included community education on gender socialisation – '*address at a core level how we bring up males and females … needing to slot into compartments*' - parenting skills, and addressing misconceptions; education to build health professionals' skills to identify and support DV those affected; and inter-professional collaboration between nurses and clinical psychologists. Support for both the target and abuser and the need to ensure sufficient resources – e.g., refuges - are available to help those affected by DV was suggested.

4. Discussion

This study provides evidence of Australian nursing and midwifery students' beliefs about, and attitudes towards DV from nine universities in six Australian states. Across the six DV subscales, there were no significant differences in scores by year of the program. While midwifery students are exposed to routine screening of women for DV, and this may explain their higher scores compared to nursing, our findings show no developmental change over the course of the program for either student nurses or midwives. This finding suggests that students' program of study and clinical learning currently contribute little to their development of attitudes towards DV. This may be due to limited content on the topic within programs, largely due to crowded curricula and the lack of a mandate requiring this content. These findings suggest a need to review nursing and midwifery curricula to investigate ways to incorporate content about DV and to scaffold student learning across the program.

With our larger national sample, our results confirm and extend earlier studies that highlighted deficiencies in student beliefs about power, gender and attitudes tolerant of DV (Ben Natan et al., 2016; Bradbury-Jones and Broadhurst, 2015; Crombie et al., 2017).

A significant finding from the current study is the discrepancy between nursing and midwifery students. Midwifery students' mean scores indicated they were less likely to justify or excuse DV. This may reflect their different practice contexts. All of the states represented in this study recommend antenatal screening for DV at a woman's first antenatal visit (AIHW, 2015). Thus, midwifery students are exposed to the concept of DV early in their programs and may have early and consistent work-based learning about DV. Given screening for DV is not routine in nursing settings, nursing students may have less exposure to inquiring about or providing care for those affected by DV.

Although the number of students in dual nursing/midwifery programs in this study is small, it is important to note that this group were more likely to report attitudes and beliefs similar to nursing students. The 4th year dual degree students had the least favourable attitudinal scores, and dual degree students were the most likely to justify or excuse DV. The reasons for this may be multiple; however, dual degree students are studying two programs with diverse and conflicting philosophies, through two interwoven curricula. Students enrolled in these dual curricula, may experience content overload, which may lead to cognitive fatigue towards the end of their program. Whilst midwifery curricula may contain more targeted content on screening and responding to DV, an overburdened nursing curriculum may not accommodate focused education on distinctive issues such as DV (Häggblom, 2013).

Our findings re-affirm that there is clear evidence of a need to continue to address DV content in undergraduate curriculum (Lovi, Hurley & Hutchinson, 2018a; Beccaria et al., 2013). Previously, Doran and Hutchinson (2016) reported findings from an Australian single university study describing student attitudes and beliefs that resonated with stereotypical community attitudes and beliefs about DV. This finding is repeated in the current national study, whereby nursing students in particular, resisted acknowledging the dominance of men as perpetrators of DV, and male students held more violence-tolerant views compared to female students. Qualitative responses by a number of students in the current study provide further insight into these attitudes, with some expressing the opinion that recognising DV as primarily affecting women diminishes attention to men as victims, or that

the data on women as victims is a distortion that exaggerates the extent of DV experienced by women (Lovi, Hurley & Hutchinson, 2018b). Findings from a recent study of Australian nursing and paramedicine academics reported gendered professional attitudes towards DV. In this study, male academics were more likely not to include DV in teaching and demonstrated professional role resistance toward the inclusion and recognition of DV in teaching (Lovi, Hurley & Hutchinson, 2018b).

These finding resonate with studies of the Australian general community, where attitudes demonstrate a trend towards fewer people agreeing that DV is primarily perpetrated by men, along with a decrease in the number who recognise that women are more likely to be harmed by DV and who agree that DV against women is common (Webster et al., 2018; VicHealth, 2014). Violence supportive attitudes including those that excuse the perpetrator, justify violence, minimise violence and mistrust women's reports of violence, are recognised across health (Sawyer et al., 2016), education (Australian Human Rights Commission, 2017) and government contexts as key barriers to screening and support for those who experience violence (Baird et al., 2018).

It is recognised that educational preparation is directly associated with students' personal attitudes and beliefs (Bradbury-Jones and Broadhurst, 2015) as well as their knowledge and preparedness to screen for and support women reporting DV. Acknowledging these is key when considering the professional values that students take into practice (Parandeh et al., 2015). Our qualitative findings demonstrate that students who elected to provide a narrative text response understood the physical and psychological aspects of DV, and the impact of DV beyond those directly affected. These students also perceived that health professionals are not adequately prepared to identify and manage DV, and that a multi-system approach is required to address DV.

We suggest that nursing and midwifery curricula should include DV content to address the gap in student knowledge specifically related to *power and gender*, and *myths about victims and perpetrators*. Furthermore, these concepts should be scaffolded throughout the curricula to encourage developmental awareness and understanding of DV as students develop their professional identities and professional skill sets. Furthermore, our findings strengthen the argument for DV to be explicitly included in future revisions of Nursing and Midwifery Standards for Practice. If nurses and midwives lack knowledge, are not adequately prepared to confront DV or provide care for those impacted by it, those affected may be unable to speak up, access therapeutic care and be provided with the skills and resources to manage their situation, regardless of how responsive health services are designed to be (WHO, 2017). In addition, nurses and midwives are often mandated to notify children's exposure to DV. Without adequate preparation, nurses and midwives will struggle to fulfil this safeguarding function. Further research is required to determine other influences of attitudes towards DV among all cohorts of students, the attitudes amongst teaching staff and the nature of embedded philosophies in curricula, and other questions of cultural ontology and how education can address these.

4.1. Limitations

While every effort was made to ensure the rigour of the study, limitations were present. Nine of a potential 36 Australian Universities offering Bachelor of Nursing and Midwifery degrees were included in the study. It is possible that students from other universities may have had different educational experiences and may hold different attitudes towards domestic violence. Some universities had higher participation rates than others, meaning that differences in attitudes between participating universities were potentially missed. Finally, student participation in the study was voluntary. First year students participated in higher numbers and it is possible that students who held strong feelings towards DV were more likely to take part in the study. These factors may limit the ability to generalise to the Australian undergraduate nursing and midwifery population.

5. Conclusion

This descriptive, multi-site cross-sectional survey study provides evidence that this large cohort of Australian nursing and midwifery students had a limited understanding of DV. With one in three Australian women over 15 years of age experiencing DV, and increasing numbers of men reporting experiencing DV, it is vital that all nurses and midwives are adequately prepared to identify and care for these people. Our findings suggest that current curricula, nursing and dual degrees in particular, are not addressing the development of respectful attitudes and beliefs about DV. These findings suggest a critical need to examine undergraduate curricula and identify ways in which student's knowledge and skills about DV can be developed. This study provides evidence that nurses and midwives require more education than they currently receive to learn to care for people who experience DV. Further research should focus on the factors that may shift attitudes such as curriculum content and experiences during nursing and midwifery practice, together with the ability to think about, and reflect on, societal issues in a more global way.

Conflicts of interest

The authors declare there is no conflict of interest.

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Appendix A. Supplementary data

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