

Australian Social Work



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/rasw20

Interprofessional Collaboration to Develop and Deliver Domestic Violence Curriculum to Dental Students

Ann Carrington, Felicity Croker, Amanda Lee-Ross, Sandra Keogh, Simone Dewar, Casey Townsend, William Shield & Winson Chan

To cite this article: Ann Carrington, Felicity Croker, Amanda Lee-Ross, Sandra Keogh, Simone Dewar, Casey Townsend, William Shield & Winson Chan (05 Sep 2023): Interprofessional Collaboration to Develop and Deliver Domestic Violence Curriculum to Dental Students, Australian Social Work, DOI: 10.1080/0312407X.2023.2241445

To link to this article: https://doi.org/10.1080/0312407X.2023.2241445

9	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 05 Sep 2023.
	Submit your article to this journal $oldsymbol{\mathcal{C}}$
hh	Article views: 386
a a	View related articles 🗗
CrossMark	View Crossmark data ☑







Interprofessional Collaboration to Develop and Deliver **Domestic Violence Curriculum to Dental Students**

Ann Carrington oa, Felicity Croker, Amanda Lee-Ross, Sandra Keogh, Simone Dewar^a, Casey Townsend^a, William Shield^a, and Winson Chan^a

^aJames Cook University, Cairns, Queensland, Australia; ^bCairns Regional Domestic Violence Service, Cairns, Queensland, Australia

ABSTRACT

Domestic violence (DV) is a serious social problem that impacts significantly on communities globally. While dentists are uniquely positioned to identify patients who experience DV, there is limited content specifically addressing the issue in their undergraduate training. James Cook University (JCU) dental students revealed this gap, and, in response, an interprofessional collaboration between JCU Social Work, JCU Dentistry and the Cairns Regional Domestic Violence Service was established to codesign and deliver the Dentists and Domestic Violence—Recognise, Respond and Refer program, evaluated through Participatory Action Research (PAR) cycles. The program is informed by critical and feminist social work theory with a gendered analysis of DV. The authors present the program's evolution and examine the four elements identified as central to its success: interprofessional collaboration, critical and feminist theory and gendered analysis, scaffolded content, and skills-based activities. This article will provide a guide for others starting work in this space.

IMPLICATIONS

- Designing and implementing an interprofessional domestic violence curriculum informed by critical theory and tailored for dental students' can help meet their learning needs.
- · Collaboratively educating dental students to recognise and respond to domestic violence cases will enable appropriate clinical interactions with patients who are victim-survivors of domestic violence and improve the quality of referrals and interactions with community support services.
- Undertaking evaluation research that guides effective domestic violence training for students across disciplines contributes to addressing domestic violence.

ARTICLE HISTORY

Received 17 November 2022 Accepted 24 July 2023

KEYWORDS

Interprofessional Collaboration; Domestic Violence Curriculum Development; Social Work; Dentistry; Dental Students; Domestic Violence Sector; Social Work Research: Cross-discipline Training; Social Work Training

Domestic violence (DV) is widely recognised as a serious, pervasive, and preventable social problem that impacts significantly on public health (Australian Institute of Health and Welfare [AIHW], 2022, 2021; World Health Organization [WHO], 2013,

2021). Global data shows that 30% of women are affected by physical or sexual violence across their lifetime (WHO, 2021), with a disproportionate number of women (82%) reported as victims of intimate partner homicides globally as compared with male (18%) victims (United Nations Office on Drugs and Crime, 2019).

In Australia, while there is growing recognition that all community members have a responsibility to address DV (Domestic and Family Violence Taskforce, 2015), alarmingly high rates of violence against women persist (AIHW, 2022). Statistics show that specific groups within our community are at higher risk of experiencing violence by a current or previous intimate partner (AIHW, 2022).

Domestic Violence and Dentistry

Dentists are uniquely positioned to identify patients who experience DV. Dentists routinely assess the head and neck where signs of physical trauma are often visible, and they frequently encounter common, more subtle manifestations of DV such as anxiety, depression, and triggered trauma (AIHW, 2017; 2022; Coulthard et al., 2020; Coulthard & Warburton, 2007; Kenney, 2006; Nelms et al., 2009; Raja et al., 2014). Further, dentists play a key role as DV responders within the health sector (Bregulla et al., 2022; Foster, 2019), which includes raising awareness of DV and referring victim-survivors to appropriate services (Femi-Ajao, 2021). While Dentistry faculty members indicate the importance of incorporating DV educational material into dental curricula, published evidence (Gibson-Howell et al., 2008; Patel et al., 2014) and feedback from professional peers indicates that little emphasis has been placed on DV education for Australian undergraduate dental students.

Provision of DV Education to Dentistry Students

Internationally different models have been implemented to educate dentistry students utilising didactic instruction through brief, one-off workshops (Buchanan et al., 2021; Danley et al., 2004; Everett et al., 2013); online webinars (McAndrew et al., 2014); and role plays replicating the dental clinical setting (Danley et al., 2004; Gibson-Howell et al., 2008). Additionally, Brown et al. (2021) and Raja et al. (2015) found simulation with trained actors, role plays, and video demonstrations to be effective delivery methods.

The Dentists and Domestic Violence—Recognise, Respond and Refer program (hereafter referred to as the program or the DDV-RRR program) incorporates, and extends, aspects of these DV educational strategies. The innovative program was developed in response to JCU Bachelor of Dental Surgery (BDS) students' concerns that DV was a challenge they felt underprepared to respond to when encountered in clinical practice. At the inception of this program, no other DV education programs were identified for undergraduate dentistry students in Australia. As such, the program embedded in the BDS is a recognised pioneer in the Australian context (Australian Dental Association, 2018; McMillan, 2017) and, accordingly, has received several awards, including an Australian Award for University Teaching for Outstanding Contribution to Student Learning (2019). While this program has been developed for undergraduate dentistry students, the authors suggest that it would be transferrable to other disciplines with contextual adjustments.

The development of the program through the different Participatory Action Research (PAR) cycles has resulted in a curriculum that integrates four essential features, which differentiate it from established DV education models. These are interprofessional collaboration (Abel et al., 2012; Busch-Armendariz et al., 2011; Farmer-Dixon et al., 2016; Kuliukas et al., 2017; Petrosky et al., 2009); critical and feminist gendered analysis of DV (Carrington, 2014, 2020a; Morley & Dunstan, 2016); scaffolded content (Goldingay et al., 2016; Kantar et al., 2020;; Wilson & Devereux, 2014); and skills-based activities (Brown et al., 2021; Gibson-Howell et al., 2008; Kantar et al., 2020; Wilson & Devereux, 2014).

The program involves an interprofessional collaboration between JCU Social Work and the DV sector, specifically the Cairns Regional Domestic Violence Service, with JCU Dentistry. Each collaboration member is valued for their significant contribution of knowledge and skills from their respective discipline to the program. However, this article highlights the specific contribution of social work to the program's curriculum.

Social work as a profession is committed to addressing DV at a systemic and interpersonal level (Australian Association of Social Workers [AASW], 2017, 2018). The DDV-RRR program is underpinned by social work theory, including the Critical Social Work and Social Justice Framework, as well as relevant social science theory. Specific social work concepts and skills are valued by interprofessional collaborations on DV education and support. This includes social work's social, rather than individualistic, understanding of DV, interpersonal skills, group facilitation skills, biopsychosocial assessments, organising and facilitating stakeholder meetings, research expertise, and approach to pedagogy (Busch-Armendariz et al., 2011; Kuliukas et al., 2017; Petrosky et al., 2009). In addition, the program incorporates trauma-informed care and utilises the "predominant aggressor model", aligning with many of the recommendations in the AASW Family Violence Curriculum Best Practice Guide (2018).

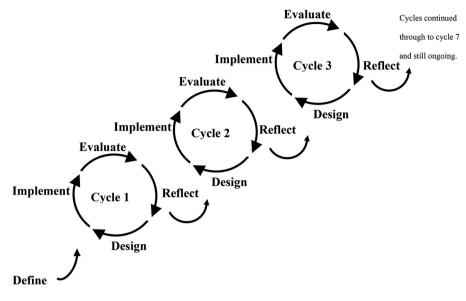
In this article we present the evolution of the program. First we outline the PAR methods incorporated into the program. We then provide findings of the research, starting with an overview of the current program. Next, we discuss reflective summaries of two different PAR cycles to evidence elements of development and the model. Finally, we explore aspects of student feedback, both quantitative and qualitative, gathered across the life of the program to support the development and its effectiveness and importance from the student perspective. The discussion section reinforces the four essential elements that have made the program robust and differentiated from other curricula.

Method

Participatory Action Research (PAR)

The program is underpinned by the PAR model, which is an effective research methodology built on principles of transparency, identifying underlying assumptions, working collectively, and learning from previous experiences (Alston & Bowles, 2019; Van-Acker et al., 2021). This approach enables the interprofessional collaborators to continually engage in evaluation and reflection to improve effectiveness of the curriculum content, delivery methods, and structure, and provides opportunities for BDS students to become coresearchers.

Annually, the program moves through an adapted PAR cycle of design, implement, evaluate, and reflect (see Figure 1). Evaluation is undertaken through several methods



The problem of requiring training in responding to domestic violence

was identified by 5th year students on clinical placement.

Figure 1 Annual PAR process: Design, Implement, Evaluate, Reflect

including student-researcher projects, collaborator projects, and initially a general course evaluation. These research projects have received JCU Human Research Ethics Committee approval (H6553; H7485). A systematic literature review was registered with the International Prospective Register of Systematic Reviews (PROSPERO) database (CRD42021266411).

Reflection involved collaborators reflecting on questions such as what has been delivered, what worked or did not work, what is missing, how best to deliver challenging content, and what could help to enhance student learning and the student experience. Elements informing collaborators' reflections included personal experiences of teaching the program, expertise in content and curriculum development, and informal and formal feedback from students. Findings from student-researchers' projects, collaborators' projects, reflections, and extant literature informed the revision of curriculum content, delivery methods and structure of the program. The revised program was implemented the following teaching year, and was subsequently evaluated, reflected on, and adapted accordingly. To date, the program is in the seventh PAR cycle. An overview of the delivery mode, student numbers, and the different evaluation projects across the PAR cycles is captured in Table 1.

Findings

Overview of the Current Program

Review of the seven PAR cycles, identified four essential elements central to effectively delivering difficult content in engaging and meaningful ways specific to dentistry. These were interprofessional collaboration, critical and feminist theory and gendered

Table 1 Program Delivery Mode, Student Numbers and Evaluation Projects by Year

		•		
Cycle #	Year	Delivery mode and student #	Evaluation projects	
One 2015		One-off information session for 5th year (68)	General course evaluation with a question on the value of the session	
Two	2016	Same updated information session delivered to 3rd year (82), 4th year (72), and 5th year (74)	Student project evaluated across year levels via presurvey, postsurvey, and focus groups	
Three	2017	Scaffolded program introduced with different sessions delivered to 3rd year (66), 4th year (83) and 5th year (71)	Student project evaluated across year levels via presurvey and postsurvey	
Four	2018	Scaffolded program with different sessions delivered to 3rd year (76), 4th year (67), and 5th year (78)	Student project evaluated across year levels via presurvey and postsurvey; graduated students via online survey	
Five	2019	Scaffolded program with different sessions delivered to 3rd year (69), 4th year (75), and 5th year (68)	Collaborators evaluated across year levels via presurvey and postsurvey	
Six	2020	Scaffolded program with different sessions delivered to 3rd (88) year, 4th year (72) and 5th year (73)—but disrupted by COVID-19	Collaborator evaluation project collected presurvey and postsurvey for 4th year, but due to COVID-19 restrictions and disruption to the program delivery, formal evaluation was not possible for 3rd and 5th years	
Seven	2021	Scaffolded program with different sessions delivered to 3rd year (65), 4th year (84), and 5th year (71)—but disrupted by COVID-19	Due to COVID-19 restrictions and disruption to the program delivery, formal evaluation was not possible. Student researchers conducted a systematic literature review	

analysis, scaffolded content, and skills-based activities. The interprofessional collaboration enabled the team to be responsive and apply content, delivery methods, and activities to suit the learning needs of the student dentists. The application of critical and feminist theory and a gendered analysis of DV ensured the content challenged myths and aligned with current understandings that identify DV as a gendered issue (Domestic and Family Violence Taskforce, 2015). This ensured that the student dentists recognised DV as a social and structural issue rather than a problem of the individual or couple. The scaffolded approach was important as it enabled content and activities to be introduced and built upon in accordance with the students' level of clinical experience. Finally, skillsbased practice activities that build competence have continued to be requested by students across the life of the program. Based on the experience of developing and evaluating the program, Table 2 provides an outline of the facilitation approach, delivery method, content, and activities we suggested as basic requirements within a scaffolded approach for teaching DV in disciplines that do not traditionally have social theory and DV within their content.

Reflective Summaries of Two Different PAR Cycles

To support the suggestions captured in Table 2, and to evidence the processes engaged in through the PAR cycles, we have included summaries of the process from two years spaced within the seven cycles of the program.

Cycle Two in 2016

Design—Based on feedback from BDS students the collaborators revised and updated content further to enhance alignment with dentistry and provide more specific dental content.

Table 2 Program Facilitation, Delivery Method, Content, and Activities by Student Year-Level

Year level	Facilitation	Delivery mode	Content covered	Activities
3rd year	Co-facilitation, social work and DV sector, supported by dentistry	1 × 2-hr small group combined lecture with some workshop activities.	 Background Relevance to dentistry Social work theory DV definitions, dynamics, impacts, and myths Legal and social context Power Basic recognise, respond, refer (RRR) What is expected of you? 	Whole group activity exploring preconceived ideas and attitudes held by students Whole group short activity re barriers to leaving Small group activity re legal social historical context
4th year	Co-facilitation, Social work and DV sector, supported by dentistry	1 × 2-hr lecture to whole group 1 × 2-hr interactive workshop in small groups	 Review 3rd year content Trauma-informed care Advanced Recognise, indicators, screening, strangulation Advanced Respond, opening conversations, informed consent, confidentiality, documentation Advanced Refer, reporting, referral points Documentation What is expected of you? 	 Whole Group extended activity re barriers to leaving Reasons dentists don't screen Exemplars for routine screen and opening a conversation Role-play routine, screening script Role play re open up a conversation Role play, full RRR and documentation Critical reflection of full role play
5th year	Co-facilitation, Social work and DV sector, supported by dentistry	1 × 1-hr lecture to whole group 1 × 2-hr lecture whole group 1 × 2-hr interactive workshop in small groups	 Review 4th year content Intersectionality, power, and privilege Working with culture and diversity Unintended consequences Working collaboratively across disciplines Reflexive practice, selfcare, and supervision DV: a community response—personal and professional What is expected of you? 	 Case study from student practice experience Critical thinking about how to RRR, and unintentional consequences Whole group activity re power, privilege, and intersectionality, links to DV Small group exercise, critical analysis of case study RRR, intersectional elements, and unintended consequences

Implement—Although collaborators had established that the educational session was valuable and would continue, it was unclear where it would be best positioned within the course curriculum. Therefore, the same training session was delivered to 3rd, 4th, and 5th year BDS students and their feedback was elicited to explore where they thought the program would best fit in the course. Evaluate—Student-researchers used a mixed-methods study including presurveys and postsurveys and focus groups to evaluate the educational sessions. The training was considered valuable, and it was identified that starting this earlier in the degree would be beneficial. The students also expressed the need to increase the practical component of the training. Reflect—Collaborators' reflections supported the introduction of DV educational content in early years. However, collaborators determined that due to the quantity of content, scaffolding learning across the latter three years would be advantageous. A scaffolded approach would ensure theory,

content, and practical elements were all provided with the appropriate space and built upon foundations. The Dentistry collaborator raised concerns that the gendered focus could be a potential barrier to student engagement with the content as there had been some "push back" from students regarding the gendered lens applied. This was noted in classes with comments such as, "What about men?" and "Women are just as violent as men". It was also noted within informal feedback to the Dentistry collaborator. The importance of maintaining a gendered analysis was emphasised by the Social Work discipline and the DV sector. It was agreed that a gendered analysis would be maintained; however, material was adapted to make it more accessible and effective. For example, we started using screening for breast cancer to demonstrate why we frame the issue of DV as gendered and why resources and responses serve specific groups. As a medical example, it more closely aligned with the dental students' current knowledge base and world view, so this example could be more easily extrapolated to transfer this understanding to the issue of DV.

Cycle Five in 2019

Design—Based on the evaluation and reflections of the previous cycle, collaborators redesigned elements of the scaffolded program across 3rd, 4th, and 5th year. This included adding further content relating to working across cultures and documentation, increasing role-play activities, addressing confusion around violence in the context of domestic violence and including trauma-informed care. Implement—The Social Work discipline and DV sector collaborators delivered the scaffolded program together where possible. The third-year session remained largely unchanged but included content addressing confusion around defining "violence" in the context of domestic violence. It was delivered as a two-hour didactic learning experience. Based on the feedback and evaluation, small tutorial groups for the 4th and 5th year BDS students were maintained. The content for the 4th year session was adjusted to include content across cultures and to introduce the concept of trauma-informed care. It was delivered as a two-hour workshop (for small tutorial groups) followed by opportunities to practise new knowledge in role-play activities. The 5th year session was revised to include more in-depth information and advanced skill development for working across cultures. Risk assessment and safety planning was also included, delivered as a two-hour workshop with small tutorial groups that increased content but maintained problem-based learning, case studies, and role-play activities.

To provide a sense of the types of activities and the level of exposure to DV content we have included several brief case studies drawn from students' clinical experiences. These were collected with permission from a 5th year group exercise where these real case scenarios were critically unpacked and reviewed in relation to appropriate RRR techniques, and in relation to consideration of any potential unexpected consequences, with a specific focus on the victim-survivor's safety. Please note that these examples were written informally for this activity and not meant to be a clinical case note. However, students were asked to reflect on use of language, and training on use of language was introduced later in the program.

Case 1: A 37-year-old patient attended for a comprehensive exam and subsequent treatment. The patient had untreated trauma from years ago and disclosed she had been a previous victim of domestic violence and was currently going through the court system after seeking help, 9 months previously.

Case 2: A 50-year-old Aboriginal women presented with facial swelling and multiple teeth aches. She reported that her partner used an axe to hit her. No facial laceration. Obvious broken jaw. Multiple other scars in facial region.

Case 3: A patient presented with a missing lower tooth after "trauma" on the weekend. The patient was very timid and evasive. She mentioned something about getting into a fight but nothing she said made much sense. She seemed to be going around in circles and was very teary.

Evaluate—In 2019, due to changes to the research component of the BDS degree and the need for students to conduct original research, there were no new research groups available to evaluate the undergraduate program that year. However, to ensure there was continued opportunity for student feedback and evaluation, collaborators, together with the 2018 student research team, implemented evaluation surveys to the undergraduate students across years 3, 4, and 5. Evaluations identified that students felt they had enough content but were seeking further opportunity for role play and modelling of skills. This was across all areas of RRR but particularly relating to skills in opening the conversation, and dentistry-specific scenarios as evident in the following quotes from student surveys: "More role play. Less information, more demonstration", "More chances to have courageous conversations during the session through role play", "Discussion of more strategies for dental practitioners to engage in conversation with suspected DV patients and more clinical scenarios and management strategies. Protocol strategies/ procedures." From this point onwards, collaborators would implement ongoing evaluation to establish more rigorous and reliable longitudinal evaluation of the program.

Reflect—Collaborators' reflections supported the areas of development identified by the students. Additionally, collaborators' reflections acknowledged that the trauma-informed care component had been received well by students and had assisted in expanding their concepts of which patients may have experienced DV. Further, trauma-informed care also seemed to alleviate some of the concern regarding raising the topic with an individual patient. Collaborators also acknowledged the need to explore concepts of informed consent and confidentiality around referral, reporting, and documentation. Collaborators reflected that including formal assessment would further embed the program and made this recommendation. It was noted that having a dentist present to support the facilitation of sessions, to answer questions, and to provide specific dental context would be helpful.

Feedback From Students Across the Life of the Program

This section presents some direct findings from student-researchers' projects and some further meta-analysis using data collected in evaluation projects to demonstrate positive outcomes that support the effectiveness and importance of the programs from the dentistry students' perspective.

Quantitative Data

In 2016, data identified an increase in the importance 3rd and 4th year students placed on the role of dentists to RRR to DV following the educational sessions (Figure 2).

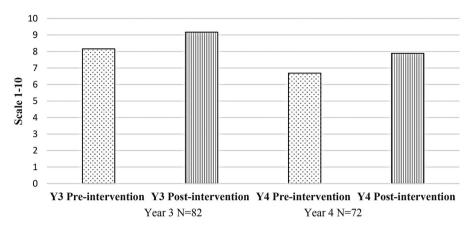


Figure 2 Very important in their role as a dentist (2016)

Data from 2016 also showed an increase in relevance of understanding by 3rd and 4th year students for dentists to RRR to DV, posteducation sessions (Figure 3).

As shown in Figure 4, 2019 data indicated a subsequent increase in 3rd, 4th, and 5th year students' preparedness to RRR to DV, preeducational and posteducational sessions. Data from 2016–2019 showed 3rd, 4th, and 5th year students continually placed a high level of importance on DV education (Figure 5).

Data from 2019 showed the number of patients BDS students believed had presented with indicators of DV during their 5th year clinical placements (Figure 6). Informing the students' identification of DV were the two previous years of training which included awareness of a range of indicators and dynamics across all types of DV including physical, psychological, emotional, spiritual, cultural, sexual, financial, and with an emphasis on coercive control. It is important to note that while some students may have been using their training to identify what they believed to be DV, many worked with victim-survivors who openly disclosed their DV situation, and many others were working in contexts where DV was included as part of the referral

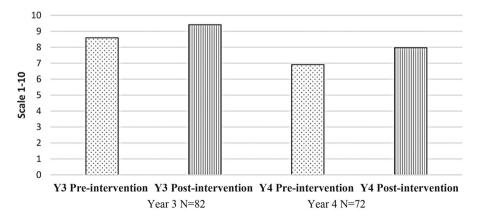


Figure 3 Relevance of understanding DV for dentists (2016)

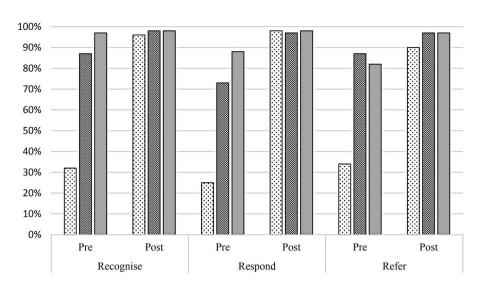


Figure 4 Percentage of Year 3, 4, 5 students Prepared to Very prepared to recognize, respond and refer to DV pre and post educational session, 2019 (5 point scale)

□ 3rd 🖾 4th 🔲 5th

or intake process (e.g., public clinics, hospitals, and the Northern Territory where reporting DV is mandatory).

Qualitative Data

Qualitative data from evaluation projects, and unsolicited feedback highlighted that students found the DV content and teaching activities engaging and useful. For example, one student stated, "I really liked the workshop, I really enjoyed the videos, interactive activities and general presentations" (4th year, 2020). Another student said, "Cases and videos were helpful to understand DV and how to manage and discuss it as a dentist" (4th year, 2020). In addition, qualitative data shows the educational sessions assisted students to understand their responsibility as future dentists to RRR to DV.

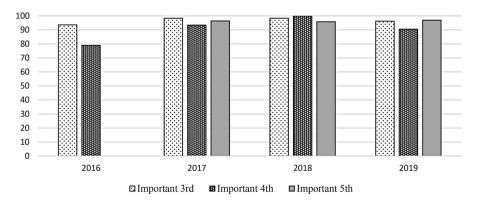


Figure 5 Importance of DDV-RRR education for Year 3, 4, 5 students

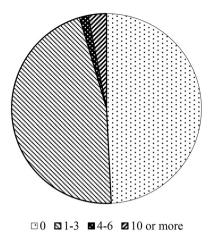


Figure 6 "How many patients have you had that you believe presented with indicators of domestic violence?"—Year 5 2019

For example, one student said, "We can be the first step to get help ... the key to the door so they can go and get help" (5th Year, 2016). Another student stated:

It's not just about looking at their health; it's about looking at the patient as a whole. I'm not a counsellor, but I may be the first person that notices this. This is something we can influence and help with. (Graduate, 2017)

A further student said:

These workshops profoundly impacted on my understanding ... and appreciation of how I fit in my role as a dentist. [They] taught that addressing DV is within my scope of practice and gave me the permission that I needed to "involve" myself and open that conversation ... [also] What to say, how to say it, and then where to go from there. (5th Year, 2019)

Students also identified areas for further program development with these suggestions informing the evolution of the curriculum as discussed in the "Reflective Summaries of Two Different PAR Cycles" section of this article.

Discussion

Four essential features of the program are discussed in detail, to show that bringing these features together in the one program differentiated it from other programs. Furthermore, this discussion shows that social work academics play a significant role in bringing together and bridging disciplines in the delivery of high quality relevant training to dentistry students.

The program is founded on interprofessional collaboration between the disciplines of Social Work and Dentistry, and the DV sector. Interprofessional collaboration aligns with the theoretical orientation underpinning this program (Carrington, 2014, 2020a), and each collaboration member brings their professional knowledge and practice expertise to the development and delivery of DV material. Interprofessional collaboration enables the program to draw on the DV sectors' expertise in working with victim-survivors, while involvement of Dentistry enables generic DV educational material to be

adapted for the dentistry context. The specific contribution from the Social Work discipline includes articulating the theoretical orientation of the program and drawing from social work theory, and social theory more broadly. In addition, as mirrored in other programs, social work contributes interpersonal skills, group facilitation skills, biopsychosocial assessments, and a social and systemic understanding of DV (Busch-Armendariz et al., 2011; Kuliukas et al., 2017; Petrosky et al., 2009). A "social work informed" approach to pedagogy also was incorporated into the program (Carrington, 2020b; Petrosky et al., 2009).

While we have identified interprofessional collaboration as an essential feature of this program, we acknowledge that in addition to the benefits, this is a complex space comprising of different knowledge bases, values, and world views. While one may work to find similarities, it is also important to negotiate the differences, tensions, power imbalances, and a range of other considerations for the collaboration to be successful. For a more in-depth exploration of the benefits and challenges, please refer to Carrington et al. (2023) where we critically reflect on the collaboration guided by Fook's (2015) critical reflection model.

Inclusion of a critical and feminist and gendered analysis reflects current statistics on DV, and is in line with relevant state and national frameworks and reports (AASW, 2018; AIHW, 2022; Domestic and Family Violence Taskforce, 2015). As a majority of dentistry students commence their studies with no prior formal education on DV (Everett et al., 2013), a gendered analysis enables dentistry students to examine the nuances of DV, including power and the sociocultural-political context of DV (Carrington, 2014, 2020a; Morley & Dunstan, 2016). Further, a gendered analysis addresses the simplification of complex issues, such as women's use of violence (Larance et al., 2019).

Scaffolding is associated with Vygotsky's concept of the Zone of Proximal Development (ZPD), where educational activities are designed for incremental learning within a supportive social environment (Goldingay et al., 2016; Kantar et al., 2020; Wilson & Devereux, 2014). Due to the complex and sensitive nature of DV, scaffolding enables incremental learning of foundational content in 3rd year, and application of advanced concepts to BDS students' clinical practice in the 4th and 5th years of the degree. Furthermore, as DV education often involves attitudinal change (Connor et al., 2011; Danley et al., 2004; Isailă et al., 2021), scaffolding material provides time for reflection and integration of content between annual educational sessions (Wilson & Devereux, 2014). While one-off DV educational sessions for dentistry students have been found to be effective (Buchanan et al., 2021; Danley et al., 2004; Everett et al., 2013), scaffolding can extend retention of educational material and increase a sense of competency with new skills (Kantar et al., 2020).

Finally, skills-based activities are embedded within the program's scaffolded educational material. This includes small group practice sessions and role plays. These skills-based activities build on didactic instruction and provide opportunities for BDS students to apply knowledge and develop competence in new skills (Brown et al., 2021; Gibson-Howell et al., 2008; Kantar et al., 2020; Wilson & Devereux, 2014). Moreover, role plays actively engage students in applying knowledge and skills required to RRR to DV in a simulated clinical setting (Brown et al., 2021; Gibson-Howell et al., 2008; Raja et al., 2015). This enables students to contextualise DV educational knowledge and skills in preparation for their future roles as dentists.



Conclusion

This article contributes new knowledge to the field by detailing the program. It highlights that social work can have a pivotal and valued role in the codesign and delivery of such programs with the application of critical and feminist social work theory, gendered analysis of DV, effective skills for working with victim-survivors of DV, and contributing pedagogical approaches to delivery methods. The details of the program and evaluations presented in this article can be adopted or adapted by others to establish a DV educational program for higher education students in their local context. In this way, together we can contribute to addressing the critical issue of DV in our communities.

Acknowledgements

The authors wish to acknowledge the contributions of the student researchers Nausheen Mohamed Muhajir, Aviral Aggarwal, John Dawoud, Gurleen Boparai, Manesha Mahendran, Shantelle Mazai, Lyn Nguyen, Andrew Li, Crystal Lenegan-Dry, and Fatima Ali. We would also like to thank Colleen Gage from Cairns Regional Domestic Violence Service and Dr Alex Dancyger for their recent contributions to the program. The authors would also like to extend our appreciation for the support which has enabled this program to continue across the academic Colleges at James Cook University (JCU); Dr Kris McBain-Rigg, Dr Geoffrey Booth, Dr Andrew Lee, Dr Clara Jo, Dr Dileep Sharma, Ass. Prof. Nonie Harris, and Ass. Prof. Abraham Francis.

Disclosure Statement

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

ORCID

Ann Carrington http://orcid.org/0000-0003-4712-7327

References

Abel, S., Kowal, H. C., Brimlow, D., Uchin, M., & Gerbert, B. (2012). A collaboration to enhance oral health care for survivors of domestic violence: Women's domestic violence shelters and nova southeastern University's College of Dental Medicine. Journal of Dental Education, 76 (10), 1334-1341. https://doi.org/10.1002/j.0022-0337.2012.76.10.tb05388.x

Alston, M., & Bowles, W. (2019). Research for social workers: An introduction to methods.

Australian Association of Social Workers. (2017). AASW: Violence against women is one of our most pervasive and preventable human rights violations. https://www.aasw.asn.au/newsmedia/media-releases-2017/violence-against-women-is-one-of-our-most-pervasive-and-preve ntable-human-rights-violation

Australian Association of Social Workers. (2018). Family violence curriculum best practice guide. Australian Association of Social Workers.

Australian Dental Association. (2018). JCU dentists take action against domestic violence. ADA News Bulletin, 44(21), 44-45.

Australian Institute of Health and Welfare. (2017). Hospitalised assault injuries among women and girls. Cat. no. INJCAT 184. Australian Institute of Health and Welfare. https://www.aihw.gov. au/reports/injury/hospitalised-assault-injuries-women-girls

Australian Institute of Health and Welfare. (2021). Australia's welfare 2021: In brief. https://www. aihw.gov.au/reports/australias-welfare/australias-welfare-2021-in-brief



- Australian Institute of Health and Welfare. (2022). Family, domestic and sexual violence data in Australia. Australian Institute of Health and Welfare.
- Bregulla, J. L., Hanisch, M., & Pfleiderer, B. (2022). Dentists' competence and knowledge on domestic violence and how to improve it-A review. International Journal of Environmental Research and Public Health, 19(7), 4361. https://doi.org/10.3390/ijerph19074361
- Brown, T., Mehta, P. K., Berman, S., McDaniel, K., Radford, C., Lewis-O'Connor, A., & Woo, B. (2021). A trauma-informed approach to the medical history: Teaching trauma-informed communication skills to first-year medical and dental students. MedEdPORTAL, 17, 11160. https:// doi.org/10.15766/mep_2374-8265.11160
- Buchanan, C., Kingsley, K., & Everett, R. J. (2021). Longitudinal curricular assessment of knowledge and awareness of intimate partner violence among first-year dental students. International Journal of Environmental Research and Public Health, 18(11), https://doi.org/10. 3390/ijerph18116039
- Busch-Armendariz, N. B., Johnson, R. J., Buel, S., & Lungwitz, J. (2011). Building community partnerships to end interpersonal violence: A collaboration of the schools of social work, law, and nursing. Violence Against Women, 17(9), 1194-1206. https://doi.org/10.1177/ 1077801211419330
- Carrington, A. (2014). The vortex of violence: Moving beyond the cycle and engaging clients in change. British Journal of Social Work, 44(2), 451-468. https://doi.org/10.1093/bjsw/bcs116
- Carrington, A. (2020a). Feminism under siege: Critical reflections on the impact of neoliberalism and managerialism on feminist practice. In B. Pease, S. Goldingay, N. Hosken, & S. Nipperess (Eds.), Doing critical social work (pp. 226-240). Routledge.
- Carrington, A. (2020b). Online and blended methods for teaching interpersonal skills and teaching professional online interpersonal skills in social work. Advances in Social Work and Welfare Education, 21(2), 22–35. https://doi.org/10.1080/14623943.2022.2154753
- Carrington, A., Croker, F., Lee-Ross, A., Keogh, S., & Dewar, S. (2023). Critical reflections on an interprofessional collaboration to develop domestic violence curriculum in an undergraduate dentistry program. Reflective Practice, 24(2), 183-196. https://doi.org/10.1080/14623943.2022. 2154753
- Connor, P. D., Nouer, S. S., MacKey, S. N., Banet, M. S., & Tipton, N. G. (2011). Dental students and intimate partner violence: Measuring knowledge and experience to institute curricular change. Journal of Dental Education, 75(8), 1010-1019. https://doi.org/10.1002/j.0022-0337. 2011.75.8.tb05145.x
- Coulthard, P., Hutchison, I., Bell, J. A., Coulthard, I. D., & Kennedy, H. (2020). COVID-19, domestic violence and abuse, and urgent dental and oral and maxillofacial surgery care. British Dental Journal, 228(12), 923-926. https://doi.org/10.1038/s41415-020-1709-1
- Coulthard, P., & Warburton, A. L. (2007). The role of the dental team in responding to domestic violence. British Dental Journal, 203(11), 645-648. https://doi.org/10.1038/bdj.2007.1066
- Danley, D., Gansky, S. A., Chow, D., & Gerbert, B. (2004). Preparing dental students to recognize and respond to domestic violence: The impact of a brief tutorial. Journal of the American Dental Association, 135(1), 67-73. https://doi.org/10.14219/jada.archive.2004.0022
- Domestic and Family Violence Taskforce. (2015). Not now, not ever. Putting an end to domestic and family violence in Queensland. QLD Government.
- Everett, R. J., Kingsley, K., Demopoulos, C. A., Herschaft, E. E., Lamun, C., Moonie, S., & Chino, M. (2013). Awareness and beliefs regarding intimate partner violence among first-year dental students. Journal of Dental Education, 77(3), 316-322. https://doi.org/10.1002/j.0022-0337. 2013.77.3.tb05472.x
- Farmer-Dixon, C., Thompson, M. F., Young, D., McClure, S., & Halpern, L. R. (2016). Interprofessional collaborative practice: An oral health paradigm for women. Dental Clinics of North America, 60(4), 857–877. https://doi.org/10.1016/j.cden.2016.05.005
- Femi-Ajao, O. (2021). Perception of women with lived experience of domestic violence and abuse on the involvement of the dental team in supporting adult patients with lived experience of domestic abuse in England: A pilot study. International Journal of Environmental Research and Public Health, 18(4), 2024. https://doi.org/10.3390/ijerph18042024



- Fook, J. (2015). Reflective practice and critical reflection. In J. Lishman (Ed.), Handbook for practice learning in social work and social care: Knowledge and theory (pp. 440-454). Jessica Kingsley Publishers.
- Foster, M. (2019). Domestic abuse and dentistry: Your duty of care. BDJ Team, 6(6), 18–20. https:// doi.org/10.1038/s41407-019-0103-9
- Gibson-Howell, J. C., Gladwin, M. A., Hicks, M. J., Tudor, J. F. E., & Rashid, R. G. (2008). Instruction in dental curricula to identify and assist domestic violence victims. Journal of Dental Education, 72(11), 1277–1289. https://doi.org/10.1002/j.0022-0337.2008.72.11.tb04610.x
- Goldingay, S., Hitch, D., Carrington, A., Nipperess, S., & Rosario, V. (2016). Transforming roles to support student development of academic literacies: A reflection on one team's experience. Reflective Practice, 17(3), 334-346. https://doi.org/10.1080/14623943.2016.1164682
- Isailă, O. M., Hostiuc, S., & Curcă, G. C. (2021). Perspectives and values of dental medicine students regarding domestic violence. Medicina, 57(8), 780. https://doi.org/10.3390/ medicina57080780
- Kantar, L. D., Ezzeddine, S., & Rizk, U. (2020). Rethinking clinical instruction through the zone of proximal development. Nurse Education Today, 95, 1-8. https://doi.org/10.1016/j.nedt.2020. 104595
- Kenney, J. P. (2006). Domestic violence: a complex health care issue for dentistry today. Forensic Science International, 159, S121-S125. https://doi.org/10.1016/j.forsciint.2006.02.025
- Kuliukas, L. J., Oehlers, K., & Berlingeri, J. (2017). An interprofessional day of Hi-Fi simulation of family and domestic violence with midwifery students and social work students. Journal of Interprofessional Education & Practice, 6, 33–36. https://doi.org/10.1016/j.xjep.2016.12.003
- Larance, L. Y., Goodmark, L., Miller, S. L., & Dasgupta, S. D. (2019). Understanding and addressing women's use of force in intimate relationships: A retrospective. Violence Against Women, 25(1), 56–80. https://doi.org/10.1177/1077801218815776
- McAndrew, M., Pierre, G. C., & Kojanis, L. C. (2014). Effectiveness of an online tutorial on intimate partner violence for dental students: A pilot study. Journal of Dental Education, 78(8), 1176–1181. https://doi.org/10.1002/j.0022-0337.2014.78.8.tb05789.x
- McMillan, A. (2017, Dec 19). Victims of domestic violence benefit from dental program: Bite, 8-10. https://www.bitemagazine.com.au/victims-domestic-violence-benefit-dental-program/
- Morley, C., & Dunstan, J. (2016). Putting gender back on the agenda in domestic and family violence policy and service responses: Using critical reflection to create cultural change. Social Alternatives, 35(4), 43-48. https://search.informit.org/doi/abs/10.3316INFORMIT.8722264613 27536
- Nelms, A. P., Gutmann, M. E., Solomon, E. S., DeWald, J. P., & Campbell, P. R. (2009). What victims of domestic violence need from the dental profession. Journal of Dental Education, 73(4), 490–498. https://doi.org/10.1002/j.0022-0337.2009.73.4.tb04720.x
- Patel, N., Bailey, E., Mahdmina, A., Lomax, A., & Coulthard, P. (2014). Domestic violence education for UK and Ireland undergraduate dental students: A five-year perspective. Journal of Dental Education, 78(8), 1162-1166. https://doi.org/10.1002/j.0022-0337.2014.78.8. tb05787.x
- Petrosky, M., Colaruotolo, L. A., Billings, R. J., & Meyerowitz, C. (2009). The integration of social work into a postgraduate dental training program: A fifteen-year perspective. Journal of Dental Education, 73(6), 656-664. https://doi.org/10.1002/j.0022-0337.2009.73.6.tb04745.x
- Raja, S., Hoersch, M., Rajagopalan, C. F., & Chang, P. (2014). Treating patients with traumatic life experiences: Providing trauma-informed care. Journal of the American Dental Association, 145 (3), 238–245. https://doi.org/10.14219/jada.2013.30
- Raja, S., Rajagopalan, C. F., Kruthoff, M., Kuperschmidt, A., Chang, P., & Hoersch, M. (2015). Teaching dental students to interact with survivors of traumatic events: Development of a two-day module. Journal of Dental Education, 79(1), 47-55. https://doi.org/10.1002/j.0022-0337.2015.79.1.tb05856.x
- United Nations Office on Drugs and Crime (UNODC). (2019). Global study on homicide: Genderrelated killing of women and girls 2019. UNODC. https://www.unodc.org/documents/data-andanalysis/gsh/Booklet_5.pdf

- Van-Acker, K., Cleas, E., Deleu, H., Gulinck, N., Naessens, L., Schrooten, M., & Moustache, A. (2021). Participatory Action Research and urban social work: Strategies for navigating the challenges of participation and reciprocation. Journal of Social Intervention: Theory and Practice, 30 (1), 3-21. https://doi.org/10.54431/jsi.664
- Wilson, K., & Devereux, L. (2014). Scaffolding theory: High challenge, high support in Academic Language and Learning (ALL) contexts. Journal of Academic Language and Learning, 8(3), A91-A100. https://journal.aall.org.au/index.php/jall/article/view/353
- World Health Organization (WHO). (2013). Responding to intimate partner violence and sexual violence against women: WHO clinical and policy guidelines. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/85240/9789241548595_eng.pdf
- World Health Organization (WHO). (2021). Violence against women prevalence estimates, 2018. World Health Organization. https://www.who.int/publications/i/item/9789240022256