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ORIGINAL ARTICLE

A cross-sectional study of Australian chiropractors' and students' readiness to identify and support patients experiencing intimate partner violence

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ABSTRACT

Objective: To explore Australian chiropractors' and final year students' readiness to identify and support patient's experiencing intimate partner violence (IPV).

Methods: This cross-sectional study used the Chiro-PREMIS, an adaptation of the Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS) to explore chiropractors' and final year students' readiness. Survey responses were analyzed through a lens of Miller's framework for developing clinical competence and chiropractic graduate competencies.

Results: One hundred forty participants completed the online survey ($n = 99$ chiropractors and $n = 41$ students). Reports of practice over the 4 weeks prior to completing the survey showed 21% of chiropractors and 20% of students consulted with patients who had disclosed they were involved in IPV. Thirty-three percent of chiropractors and 27% of students suspected a patient was involved, but that patient did not disclose. Participants report meager training in IPV. Many are unclear about appropriate questioning techniques, documentation, referrals, identifying available resources, and legal literacy. Overall, participants do not "*know*" about IPV, they do not "*know how*" to and may not be able to "*show how*" or "*do*" when it comes to managing IPV-related clinical scenarios. Further studies are needed to confirm if chiropractors have the appropriate clinical capabilities.

Conclusion: With proper preparation, chiropractors have an opportunity to make a positive contribution to this social problem. We anticipate chiropractic-specific discourse surrounding these escalating growing social concerns will highlight the intent of the chiropractic profession to make a substantial contribution to the health care of the Australian public. More studies are needed.

Key Indexing Terms: Intimate Partner Violence; Chiropractic; Curriculum; Interprofessional Education; Patient-Centered Care

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INTRODUCTION

In Australia, intimate partner violence (IPV) is a well-identified societal problem[1,2] which, irrespective of culture, involves any behavior within a personal relationship where physical, emotional, sexual, economic, or social harm occurs to anyone in a relationship.[1]

The Australian Institute of Health and Welfare reports that from the age of 15, 1 in 6 Australian women and 1 in 16 men have experienced physical, sexual violence, or emotional abuse by a current or previous cohabiting partner. Seventy-two thousand women, 34,000 children, and 9000 men seeking homelessness services reported family and domestic violence (FDV) had caused or contributed to their homelessness, in 2016–2017.[2] The clinical presentations of IPV may include physical injury, chronic pain, depression, post-traumatic stress disorder, sexually transmitted infections, and gastrointestinal conditions,[3] which are clinical presentations chiropractors are likely to see.[4] Chiropractors need to be alert to a conflict of interest if they consult with both a suspected perpetrator and their alleged victim as each has a right to autonomy and confidentiality[5] (notwithstanding statutory requirements to ensure child protection).

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Chiropractors may have a role in preventing IPV if they have appropriate screening tools.[6]

A chiropractors' knowledge and skills in recognizing IPV is likely to affect their clinical reasoning, decision-making, and clinical outcomes. Furthermore, they are obliged to comply with clinical and legal responsibilities. Even though the practice competencies for chiropractors require an understanding of their patients' health status, social, cultural, and economic circumstances,[7] there is a dearth of information regarding IPV screening and education for chiropractors. Moreover, chiropractors' ability to identify and manage patients experiencing IPV is central to the guiding principles and practices of patient-centeredness (Universal Competency 1.2) and interprofessional practice (Practice Competency 4.2).[7] How well are these competencies applied in IPV-related consultations is yet to be established.

Hence this landmark study, the first in chiropractic in Australia as well as the first in an Australian manual therapy profession will generate the initial data to enable robust discourse across the professions and stimulate further research.

Shearer et al[8] explored Canadian chiropractors' readiness to identify and manage IPV with ($n = 99$) chiropractors after 3 days of IPV training. Furthermore, studies in other health professions and countries have included medical practitioners,[9–11] dental students,[12] nurses, nursing students, midwives,[13–15] obstetricians, gynaecologists,[16] and other health professionals.[17,18] One Australian study by Sawyer et al[19] explored the "readiness" of paramedic students.

We do not know the extent to which Australian-registered chiropractors feel prepared to identify and assist patients experiencing IPV. The aim of this cross-sectional study was to explore chiropractors' and final-year students' readiness to screen for and support patients experiencing IPV. We used a purposefully adapted version of the readily available, previously validated tool for health providers to self-assess their capabilities regarding IPV, the Physician Readiness to Manage Intimate Partner Violence Survey (PREMIS).[20] We anticipate the results will inform the pre-professional and postgraduate chiropractic curricula and positively impact chiropractic practice and improve health care outcomes for those experiencing IPV. We posit chiropractic-specific discourse surrounding these increasing social concerns will highlight the intent of the chiropractic profession to make a substantial contribution to the health care of members of the Australian public who consult them.[21,22]

METHODS

Design

Ethics clearance for this cross-sectional study with nonprobability sampling was provided by Murdoch University (2021/082) and RMIT University (2021-24892-15753). Consent was inferred by the completed returned survey.

Measure

To align with our needs and to comply with ethics, we made some minimal adaptations to the PREMIS.[20] We added:

- questions to allow participants to identify as practitioner or student;
- questions about previous IPV training;
- questions about recent encounters during clinical practice with patients exposed to IPV;
- a response option of, "prefer not to answer" for multiple choice style questions we felt might trigger stress in the respondent; and
- a link to resources for support for participants "triggered" by the questions.

In all other ways, the 29-question adaption of the PREMIS we named the Chiro-PREMIS for this study closely replicates the content and format of the PREMIS. Since the questions relating to perceptions, myths, and truths about IPV were unchanged, reliability studies were not repeated. To strengthen validity, a draft of the Chiro-PREMIS was tested with 1 biomechanics academic and 5 clinicians, all of whom provided feedback about the survey instrument's content, clarity, acceptability, and utility on different platforms.

Recruitment

The final version of Chiro-PREMIS was distributed via email invitation, which included a link to the online survey. To avoid possible systematic sampling errors caused by limited coverage, the invitation to participate was distributed to registered chiropractors through electronic media such as emails and advertisements to the researchers' networks and various Australia-wide closed social media platforms such as LinkedIn,[23] Facebook[24] groups (Western Australian Chiropractors, Australian Chiropractic discussion groups, Australian Chiropractors Association Special Interest Group of Women in Chiropractic, and Australian Chiropractors), and to directors of multi-practitioner clinics. The heads of the respective chiropractic programs at 2 universities ensured the distribution of the invitation email to their entire 5th-year student cohorts. To ensure confidentiality, the researchers did not have direct access to participants' identities at any stage during the study.

Data Analysis

There were 3 phases to our analytical strategy. All analyses were conducted using survey monkey (Survey Monkey Enterprises, Momentive). In reporting, for clarity in questions requiring a response on the 5-point Likert Scale, the outer 2 response options were aggregated into 1 level creating 3 categories of responses as described below.

We acknowledge the ongoing debate around the method and wording of questions measuring the presence of IPV,[25,26] and we considered the various interpretations of the meaning of words would affect our analysis in

Table 1 - Alignment of the Chiro-PREMIS With Miller's Framework

Scales	Total Items	Sample Items	Response Scoring	Results Table
Knows				
Perceptions of IPV	6	The strongest single risk factor for becoming a victim of intimate partner violence	Age Partner abuses alcohol/drugs Gender- female Family history of abuse Prefer not to answer Don't know None of the above	2
Myths and truths about IPV	9	Alcohol consumption is the greatest single predictor of the likelihood of intimate partner violence (IPV)	True/false/don't know	3
Knows How				
Preparedness for clinical tasks associated with IPV	10	Indicate which best describes—how prepared you feel to identify IPV indicators based on the patient's history	Not prepared (1) to quite well prepared (5)	4
Shows How				
Familiarity with clinical tasks associated with IPV	14	How much do you feel you know about how to document IPV in a patient's record	Not at all familiar (1) to extremely familiar (5)	5
Does				
Readiness to identify and support IPV victims	4	Please indicate your level of agreement—I don't have the necessary skills to discuss the abuse with a IPV victim who is male.	Strongly disagree (1) to strongly agree (5)	6

indeterminable ways. Hence, our intent was to take a "snap-shot" of practice. To that end, given the development and assessment of clinical competence in a typical curriculum in the health professions are organized as per Miller's framework in which the student is expected to "*know, know how, show how, and do*,"[27] in the second phase of our analysis, we scrutinized participants' self-assessment reports through Miller's lens, which provides a broad perspective rather than a narrower report of individual practice. Table 1 shows the alignment between the Chiro-PREMIS and Miller's framework. We explored if participants:

- ***Know*** the facts, concepts, and principles of IPV.
- ***Know how*** to apply that knowledge when engaged in clinical problem solving.
- ***Show how to*** perform the required clinical skills.
- ***Do*****,** that is, they can utilize their skills when appropriate in clinic to identify and support patients who may have IPV-related health care needs.

Domain names underwent re-classification to reflect concepts familiar to academics and clinical education specialists and for greater alignment with our aim to identify gaps, prepare for the discussion, and develop training modules to ensure the achievement of chiropractic graduate competencies, which constituted the third component of our analysis.

RESULTS

Sample

We received completed surveys from *(n = 99)* Australian Registered Chiropractors (response rate, 2%) and (*n = 41*) from 2 Australian universities (response rate, 28%). Chiropractors' age range was 25–54, 68% female, 32% male with 15% from culturally and linguistically diverse backgrounds (from a non-Anglo Australian background). Students' ages ranged from 18–34, 69% were female, 32% male with 12% from a culturally and linguistically diverse background. Whether or not these figures represent the background and gender profile of the chiropractic profession or student cohort is unknown. No participant identified as Aboriginal or Torres Strait Islander.

Of the chiropractors, 89% graduated from an Australian university, 45% held a baccalaureate chiropractic degree, 38% a master level degree, 7% honors, and 6% doctorates (clinical doctorates from United States). The Australian States in which they practiced were as follows: Western Australia 31%, Victoria 29%, New South Wales 18%, Australian Capital Territory and South Australia 4%, 2 from Tasmania, and 1 from the Northern Territory. Fifty-three percent worked in a group practice with other chiropractors, 39% in solo practice, 28% in a group practice with other health professionals, 5% were casual or full-time academic, and 9% worked as clinical supervisors in an academic setting. Our data analysis did not explore any link between the participants' individual responses and

their level of education, the state or situation in which they practiced.

Recent Encounters With IPV Patients

Reports of practice over the 4 weeks prior to completing the survey showed 21% of chiropractors and 20% of the students had consulted with patients who had disclosed they were involved in IPV. Thirty-three percent of chiropractors and 27% of students suspected a patient was involved, but that patient did not disclose any information. Parenthetically, we did not explore what criteria individuals used to identify the patients who reported being involved in IPV, nor did we explore the ethnicity or any other factors about the patients. Such matters may be of concern in future studies.

Training About IPV

Eighty-two percent of chiropractors and 59% of students had no training in IPV in the previous 5 years. Furthermore, 98% of chiropractors and 93% of students had no training in IPV in the 6 months prior to taking the survey. Training involved watching videos or attending a talk or lecture with very few attending skill-based training.

Perceptions, Myths, and Truths About IPV

Most participants answered all questions correctly; however, there are concerns it would be difficult to make a generalized statement that this cohort "*knows*" about IPV in any depth as shown in Tables 2 and 3 and explained below.

In Table 2, in responses to Item 1: *The strongest single risk factor for becoming a victim of intimate partner violence*, shows a high percentage of chiropractors chose the "*preferred not to answer*" option and this ought to be explored in future studies. A high percentage of participants "*don't know*" the truth about perpetrators (Q2) or warning signs (Q3). An even higher percent "*don't know*" appropriate ways to ask about IPV (Q5) or the common injuries (Q6).

Table 3 again shows a high percentage of correct answers together with a very high percentage of response they "*don't know*" about alcohol consumption (Q1) and strangulation injuries (Q8).

Preparedness, Familiarity, and Readiness With Clinical Tasks Associated With IPV

Table 4 shows participants are unprepared to ask appropriate questions (Q1); respond to disclosures of abuse (Q2); document findings (Q8); make appropriate referrals (Q9); fulfill reporting requirements (Q10); or document indicators for IPV in a case history (Q3).

Notwithstanding the issues raised in Q4–Q7 may not be the responsibility of the chiropractor; participants say they are unprepared to take actions such as assess safety, readiness to change, and danger etcetera, which infers participants may not "*know how*" to use the knowledge they do have about IPV.

Table 5 shows participants' lack of familiarity about IPV regarding what questions to ask to identify IPV (Q8, Q11); why patients may not disclose (Q9); stages of an IPV situation (Q14); legal reporting requirements (Q1); documenting IPV events (Q3); and referral options (Q4).

Again, a high percentage lacked familiarity around the signs and symptoms of IPV (Q2); perpetrators (Q5); relationship with pregnancy (Q6); the chiropractors' role (Q10); determining danger (Q12); safety plans (Q13); and the childhood effects of witnessing IPV (Q7). These results infer this cohort may be unable to "*show how*" they apply their knowledge of IPV in clinic scenarios.

Further, Table 6 responses suggest participants' experience confusion about their readiness to discuss IPV with patients (Q1) but, not if they are female, male, or from a different culture (Q2); legal literacy (Q3); and the correct information gathering skills (Q4).

The results infer participants' do not "*know*" about IPV' in any great depth, they do not "*know how*" to and may not be able to "*show how*" or "*do*," tentatively suggesting overall this cohort may not have the capacity to appropriately identify and manage clinical events related to IPV.

DISCUSSION

This study showed that during the month prior to completing the Chiro-PREMIS just under a quarter of participants engaged with patients who had disclosed they were involved in IPV and even more, about a third suspected a patient was involved but they did not disclose.

The stakes are high, and chiropractors have an opportunity to make a positive contribution toward assisting with this social problem. The rising incidence and prevalence of IPV is a concern and the chiropractic profession must explore and remedy gaps in practitioners' clinical competencies around all aspects of FDV.

Like the study by Sawyer et al[19] of Australian paramedic students, our participants have tacit knowledge only, and low confidence in their preparation to manage IPV. While the role of a chiropractor is limited to identifying and referring to appropriate professionals or agencies equipped to manage IPV/FDV, a lack of familiarity with clinical assessment and support procedures and practices about IPV could potentially create a reluctance to talk with patients when they suspect it is necessary. This may present an increased barrier to patients accessing help, thereby perpetuating the abuse and its harmful effects. We know that barriers to screening for IPV have been reported among health care providers across diverse specialties and settings,[28] and they include a health provider's discomfort with the topic, poor self-efficacy, confidence, and preparation in IPV.[29] These issues are concerning and potentially only adds to the problem for those experiencing IPV, and we need to explore chiropractors' approaches more thoroughly. Furthermore, it is well known female patients expect health care professionals to demonstrate a supportive, nonjudgmental, and empathetic approach to discussing IPV.[30–32] We know that health professionals who hold poor attitudes toward women may be less likely to ask about IPV or more likely to ask about it inappropriately,

Table 2 - Perceptions of Intimate Partner Violence (IPV) – Miller's "Knows"

		C % of Correct Answers	S % of Correct Answers
Item	**Response Options**	**%**	**%**
1. The strongest single risk factor for becoming a victim of intimate partner violence	Age	0	0
	Partner abuses alcohol/drugs	17	40
	Gender- female	32	29
	Family history of abuse	26	24
	Prefer not to answer	22	2
	Don't know	0	0
	None of the above	3	2
2. The following is generally true about perpetrators of IPV	They have trouble controlling their anger	7	15
	They use violence as a means of controlling their partners	76	73
	They are violent because they drink or use drugs	0	0
	They pick fights with anyone	0	0
	Prefer not to answer	0	3
	Don't know	17	10
3. Warning signs that a patient may have been abused by his/her partner	**Chronic unexplained pain**	71	85
	Anxiety	85	85
	Substance abuse	72	73
	Frequent injuries	88	90
	Depression	74	78
	Prefer not to answer	0	3
	Don't know	11	5
4. Reasons an IPV victim may not be able to leave a violent relationship	Fear of retribution	95	93
	Financial dependence on the perpetrator	96	93
	Religious beliefs	88	78
	Children's needs	94	93
	Love for one's partner	75	73
	Isolation	86	81
	Prefer not to answer	0	0
	Don't know	4	4
5. Appropriate ways to ask about IPV?	"Are you a victim of intimate partner violence?"	12	12
	"Has your partner ever hurt or threatened you?"	64	61
	"Have you ever been afraid of your partner?"	63	80
	"Has your partner ever hit or hurt you?"	26	32
	Prefer not to answer	3	0
	Don't know	22	14
6. Which statement is generally true	**There are common noninjury presentations in abused patients**	64	71
	There are behavioral patterns in couples that may indicate IPV	70	83
	Specific areas of the body are most often targeted in IPV cases	45	57
	There are common injury patterns associated with IPV	48	66
	Injuries in different stages of recovery may indicate abuse	71	85
	Prefer not to answer	2	2
	Don't know	16	10

C: Chiropractors (n = 99); S: Students (n = 41); ***Bold****: correct answers.*

potentially causing further harm.[30,32] These principles can be extrapolated to consultations with men who may also be victims of IPV or FDV.

Many participants in this study reported their lack of competence in legal literacy and in health record-keeping related to IPV. Yet, we know it is critical to document information provided by the patient in a factually accurate way. That is, to note observations of injuries, affect, other health conditions, and anything else such as what the patient said, as close to verbatim as possible, and using quotation marks, plus, behavior observed, for example, "patient cried when they spoke about . . .".[33] Accurate and comprehensive documentation is critical for patient-centered care and follow-up should legal proceedings be initiated later.

IPV may have a negative effect on children and all practitioners, including chiropractors, have a mandated responsibility to report child abuse or neglect.[34,35] Mandatory reporting relates primarily to children, but practitioners also have a responsibility to report the abuse of adults, particularly those living in a residential service, such as psychiatric, aged care, or another government-run

Table 3 - Myths and Truths About Intimate Partner Violence (IPV) – Miller's "Knows"

Item		Response Options: True %	False %	Don't Know %
1. Alcohol consumption is the greatest single predictor of the likelihood of IPV.	C	24	**25**	50
	S	50	**26**	24
2. There are good reasons for not leaving an abusive relationship.	C	40	**31**	28
	S	32	**50**	18
3. When asking patients about IPV, providers should use the words "abused" or "battered."	C	6	**71**	23
	S	3	**85**	13
4. Being supportive of a patient's choice to remain in a violent relationship would condone the abuse.	C	4	**66**	30
	S	26	**42**	32
5. Victims of IPV can make appropriate choices about how to handle their situation.	C	**36**	30	34
	S	**26**	40	34
6. Health care providers should not pressure patients to acknowledge that they are living in an abusive relationship.	C	**65**	8	27
	S	**47**	21	32
7. Victims of IPV are at greater risk of injury when they leave the relationship.	C	**48**	13	38
	S	**39**	24	37
8. Strangulation injuries are rare in cases of IPV.	C	0	**40**	60
	S	3	**50**	47
9. Allowing partners or friends to be present during a patient's history and physical exam ensures safety for an IPV victim.	C	5	**65**	30
	S	13	**66**	21

C: Chiropractors (n = 99); S: Students (n = 38); ***Bold****: correct answers.*

facility. Chiropractors must be aware of the laws in the Australian state and territory in which they practice, as they differ slightly.

This study identified the minimal amount of time most participants had engaged in clinical education about IPV. Currently, we could identify no published, evidence-based IPV educational packages to develop the required competencies for chiropractors. It is time to develop appropriate programs, and the World Health Organization's recommendations for topics of learning about IPV for frontline health workers are a good place to start.[36] The curriculum for chiropractors must include the broader spectrum of FDV as discussed in Australian Reports referred to in the introduction.[1,2] Learning offerings ought to include a

Table 4 - Preparedness for Clinical Tasks Related to Intimate Partner Violence (IPV)– Miller's "Knows How"

		Not *or* Somewhat Prepared %	Prepared %	Well *or* Quite Well Prepared %
1. Ask appropriate questions about IPV	C	79	11	10
	S	90	3	7
2. Appropriately respond to disclosures of abuse	C	81	8	11
	S	73	15	12
3. Identify IPV indicators based on the patient's history	C	76	15	9
	S	78	10	14
4. Assess an IPV victim's readiness to change	C	87	6	9
	S	95	0	12
5. Help an IPV victim assess his/her danger of lethality	C	89	4	7
	S	88	7	5
6. Conduct a safety assessment for the victim's children	C	94	4	2
	S	95	2	2
7. Help an IPV victim create a safety plan	C	92	4	4
	S	95	0	5
8. Document IPV history findings in patient's record	C	71	19	10
	S	78	15	7
9. Make appropriate referrals for IPV	C	82	9	9
	S	73	20	7
10. Fulfill reporting requirements for IPV	C	92	3	5
	S	90	5	5

C: Chiropractors (n = 99); S: Students (n = 41).

Table 5 - Familiarity With and Clinical Tasks Related to Intimate Partner Violence (IPV) – Miller's "Shows How"

		Not *or* Somewhat Familiar %	Moderately Familiar %	Very *or* Extremely Familiar %
1. Your legal reporting requirements for IPV	C	84	13	3
	S	88	10	2
2. Signs or symptoms of IPV	C	73	18	10
	S	68	18	14
3. How to document IPV in patient's record	C	78	17	5
	S	90	10	0
4. Referral sources for IPV victims	C	79	13	8
	S	88	7	5
5. Perpetrators of IPV	C	76	20	4
	S	83	10	7
6. Relationship between IPV and pregnancy	C	90	7	3
	S	93	2	5
7. Recognize the childhood effects of witnessing IPV	C	70	16	14
	S	86	5	10
8. What questions to ask to identify IPV	C	84	10	6
	S	90	2	7
9. Why a victim might not disclose IPV	C	50	33	16
	S	32	41	24
10. Your role in detecting IPV	C	81	11	7
	S	66	22	12
11. What to say and not say in IPV situations with a patient	C	84	11	5
	S	83	10	7
12. Determining danger for a patient experiencing IPV	C	88	8	4
	S	83	12	5
13. Developing a safety plan with an IPV victim	C	92	2	6
	S	90	7	2
14. The stages an IPV victim experiences in understanding and changing her/his situation	C	91	4	5
	S	88	7	5

C: Chiropractors (n = 99); S: Students (n = 41).

discussion of the prevalence of IPV against males and IPV among people of all cultures and identity groups such as lesbian, gay, bisexual, transgender and intersex (LGBTI).

Interprofessional Practice

Chiropractors need to know how to work interprofessionally to ensure they practice with a patient-centered care focus.[7] The clinical presentations of IPV may vary from physical and musculoskeletal injuries to other disorders, which may require a multimodal approach in screening and management. For that reason, interprofessional practices and networks are a necessary component of a chiropractor's strategy for assisting those exposed to IPV.

Yet we know a recent Australian study identified final-year chiropractic and osteopathic students and new graduates found they all lacked interprofessional capabilities.[37] Also, Shearer et al[8] illuminated chiropractors' poor knowledge and awareness of whom to and where to refer patients once identified as IPV victims. Also, studies in other health professions have shown the same.[38–43] Pharmacists acknowledge they have a general lack of training and awareness of proper methods for referrals,[44] and dentists are the least likely of all health professionals to identify and refer victims of abuse, despite their specialized knowledge and skills to treat the orofacial and dental injuries of IPV victims.[45,46] There is much to be done to prepare chiropractors for their important role in supporting persons experiencing IPV.

Limitations

We acknowledge the ongoing debate around the method and wording of questions measuring the presence of IPV[25,26]; thus, we had no way of understanding the extent to which the participants had personal experience with IPV and how that may have influenced interpretations of the meaning of words and the results we received. Our adaptation of the American-designed PREMIS did not include the addition of questions related to FDV, violence against children, or terminology particular to Aboriginal and Torres Strait Islander peoples. Had we made significant changes, we would have altered the PREMIS beyond a simple adaptation, and we did not have the resources to undertake validity studies of a new survey. Future investigators may make these inclusions.

We have no way of knowing how many chiropractors received the invitation. There are currently 5473 registered

Table 6 - Readiness to Identify and Manage Claims of Intimate Partner Violence (IPV) – Miller's "Can do"

		Strongly Disagree/ Disagree %	Neither Agree/Disagree %	Agree/ Strongly Agree %
1. I feel comfortable discussing IPV with my patients.	C	48	22	30
	S	50	21	29
2. I don't have the necessary skills to discuss the abuse with an IPV victim who is:				
i. female	C	31	9	59
	S	24	11	66
ii. male	C	24	15	61
	S	18	8	74
iii. from a different cultural/ethnic background.	C	19	19	63
	S	13	18	68
3. I am aware of legal requirements in this state/territory regarding reporting of suspected cases of IPV.	C	57	23	20
	S	58	11	32
4. I can gather the necessary information to identify IPV as the underlying cause of patient medication utilization.	C	46	33	21
	S	53	24	24

C: Chiropractors (n = 96); S: Students (n = 38).

chiropractors in practice in Australia, which gave us a 2% response rate for practitioners. We administered this survey to $n = 144$ students at 2 universities, which gave us a 28% response rate. Due to the low response rate and small sample size, readers should interpret the results cautiously, given the possibility of nonresponder bias. Larger studies with a broader sample are needed to avoid any unknown sampling error before drawing firm conclusions.

Future Research

The correlation between our results and Miller's hierarchy of clinical skills, when applied to engaging with patients who may be experiencing IPV, showed this group were not clear they "*know*" about IPV in any great depth, and perhaps uncertain they "*know how*" to and may not be able to "*show how*" or "*do*," suggesting they may not at this time have the capacity to appropriately identify and manage clinical events related to IPV. Further investigations are needed to explore if the participants fully understand the related circumstances of a patient's health status and how to apply the guiding principles of patient-centeredness or interprofessional practice when confronted with alleged victims of IPV, which are competencies expected of practicing chiropractors.[7]

These investigators regard best practice in developing students' IPV competence is organizing for them to engage in IPV learning through didactic and experiential learning, simulation, case-based learning, and clinical placements at say social welfare and community clinics that specifically assist IPV victims. We argue that if the pre-professional clinical curriculum allocated time for the student to attend clinics where other health professionals assist IPV victims, it would potentially strengthen graduates' understanding and provide an opportunity to develop interprofessional relationships. Moreover, future research is needed to confirm our finding that 33% of chiropractors and 27% of students suspected a patient was involved, but the patient did not disclose.

CONCLUSION

By adapting the PREMIS for chiropractic, this cross-sectional study reports the extent of the gap in readiness among Australian-registered chiropractors and final-year students regarding their ability to identify and support patients experiencing IPV. Reports of practice over the 4 weeks prior to completing the survey showed 21% of chiropractors and 20% of the students had consulted with patients who had disclosed they were involved in IPV. Thirty-three percent of chiropractors and 27% of students suspected a patient was involved, but that patient did not disclose any information.

Participants report meager training in IPV. There appears to be a lack of competence in many pertinent clinical skills such as the most appropriate questioning techniques, documentation, referrals, identifying available resources, and in legal literacy. Regarding overall readiness to assist, when analyzed against Miller's hierarchy for the development and assessment of clinical competence, the results tentatively suggest participants lack clarity. Many are uncertain they "*know*" about IPV in any great depth, they do not "*know how*" to and may not be able to "*show how*" to or "*do*" when it comes to assisting patients who experience IPV.

Clearly, with the right preparation, chiropractors have an opportunity to make a positive contribution to this social problem. We anticipate chiropractic-specific discourse surrounding these escalating growing social concerns will highlight the intent of the chiropractic profession to make a substantial contribution to the health care of the

Australian public who consult them. More studies are needed.

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