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Do Women Feel Unprepared for the Experience of an Intrauterine Device Insertion: Findings From an Australian Study

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ABSTRACT

Objective(s): The experience of pain during intrauterine insertion can be highly variable, ranging from none to severe. The objective of this study was to explore the experience of intrauterine device (IUD) insertion from the perspective of contraceptive users.

Study Design: We conducted a qualitative study using individual semi-structured Zoom interviews with women living in Australia. We recruited participants from a larger study exploring the information needs of contraceptive users. We audio-recorded and transcribed interviews and thematically analyzed the data.

Results: Eighteen women described their experiences of IUD insertion. Although most participants described mild to moderate pain, some described severe pain exceeding their expectations and reported being unprepared for this experience. In some cases, these experiences had unexpected short and long-term consequences such as impacts on intimate relationships and fear of other gynecological procedures.

Conclusion: Intrauterine device users should be informed of the range of pain experiences that may occur during insertion, including the risk of a vasovagal reaction, and all pain management options available to them. Experiences of pain during insertion did not appear to deter contraceptive users' continued IUD use or planned future use.

1 | Introduction

Intrauterine devices (IUDs) are one of the most effective contraceptive methods available in Australia and are over 99% effective in preventing pregnancy [1]. In Australia, contraceptive users have access to two hormonal (Kyleena, Mirena) and one non-hormonal (Copper) IUDs, and these can remain in place for 3–10 years depending on the device [2]. In Australia, IUDs are commonly inserted by general practitioners (GPs), sexual health physicians, and gynecologists in outpatient and hospital settings. Inserting an IUD comprises a multi-step process involving stabilizing the cervix with a tenaculum, measuring the depth of the uterus, and inserting the device into the uterus [3]. All of these steps can be painful for patients; however, there is currently limited consensus on the most effective pharmaceutical methods to manage this pain [3]. The Royal Australian College of General Practitioners (RACGP) provides recommendations for pain management in an outpatient

setting, including the use of nonsteroidal anti-inflammatory drugs (NSAIDs) or paracetamol, anesthetic cream, cervical blocks, lidocaine spray, or penthrox, also known as the "green whistle." [4] However, a 2015 Cochrane review found that NSAIDs were unlikely to reduce pain during insertion and reported limited evidence to support the use of some lidocaine formulations [5]. Similar recommendations have been made by the Faculty of Sexual and Reproductive Healthcare (FSRH) in the United Kingdom and the Centers for Disease Control and Prevention (CDC) in the United States [3, 6]. Although most IUD users are expected to experience minimal pain during insertion, a small proportion will experience severe pain [7–9]. The RACGP encourages GPs to discuss pain management options with patients, however, due to limited research exploring what options are routinely offered to Australian contraceptive users, and unclear guidance regarding the most effective options, it is difficult to ascertain what pain management options, if any, are provided to contraceptive users. Despite recent media attention in Australia highlighting experiences of severe pain and the inadequate provision of pain relief during IUD insertion [10] there are limited studies exploring the experiences of pain from the perspective of IUD users. This study explores experiences of IUD insertion, or attempted insertion. This was part of a larger study exploring the information needs of contraceptive users more generally.

2 | Methods

2.1 | Sample and Recruitment

We recruited participants from a larger study conducted by the authors (C.C., J.C.) exploring the information needs of contraceptive users. This larger study involved a survey with 1745 respondents. We gave participants the option of leaving their email address to be contacted for an individual interview; 269 participants elected to leave their details. We entered this information into an Excel spreadsheet, and we used a random number generator to select participants to invite for an interview. To be eligible for the interview, participants needed to be currently using an IUD or contraceptive implant or have had one removed within the previous 6 months. This paper only reports on the experiences of those who had used an IUD. We reimbursed participants with a AUD30 AUD (USD19.5) gift voucher for their time. The University of Melbourne Human Research Ethics Committee approved this study (ID:23972).

2.2 | Data Collection

We conducted individual interviews over 'Zoom' from October 2022 to January 2023. The primary researcher (C.C.) conducted all interviews, and these were audio-recorded, transcribed verbatim and lasted between 30 and 60 min. We provided participants with a plain language statement and obtained oral consent prior to commencement. C.C. and J.C. developed the semi-structured interview guide. Interviews explored how participants obtained information about IUDs, their experiences of insertion and while using their IUD, and their level of satisfaction with the information available to them during this time.

2.3 | Data Analysis

We conducted a reflexive thematic analysis [11]. C.C. first read all interviews in full to become familiar with the data. We then began to inductively code each transcript, assisted by NVIVO software [12]. M.T.-S. and C.C. reviewed the first two transcripts to discuss and compare interpretations. C.C. then coded the remaining transcripts. This was an iterative process with codes adapting and developing as patterns in the data were identified. C.C. then grouped codes into initial themes and subthemes. This process occurred with the wider research team through regular meetings of MTS, JC and CC. Our analysis team comprised two qualitatively trained public health researchers (M.T.-S., J.C.) and a PhD student (C.C.). Once we established the final themes, C.C. re-read the transcripts to ensure their depth was reflected in the analysis. C.C. kept a reflexive journal for the duration of the study. We organize our results under domains of inquiry. We have accompanied participant quotes with a pseudonym, their age, IUD device used, and the setting in which it was inserted.

3 | Results

3.1 | Participant Characteristics

The average age of participants was 30 years, and most participants self-identified as Caucasian Australian ($n = 13$), were employed ($n = 14$), were in a relationship or married ($n = 14$) and were nulliparous ($n = 12$). Further demographic information can be found in Table 1. Eighteen participants discussed their experiences of IUD insertion or attempted insertion at any point in their reproductive lives. Of these, five participants discussed multiple IUD insertion experiences. Sixteen participants described their experience of IUD insertion by a GP, gynecologist, or sexual health physician in an outpatient setting, and five described the IUD insertion under general anesthetic in hospital. Pain management options provided to participants ranged from no medication to NSAIDs, anesthetic creams and sprays, and general anesthetic.

3.2 | Mismatched Expectations

All participants who described mild to moderate pain or discomfort during their IUD insertion reported that they felt prepared for the insertion process and were provided with adequate information from their health care provider. For example, Hayley, aged 37, who had her Mirena inserted at a GP clinic and experienced minimal pain reported "My GP was really good with explaining how it would feel to get it inserted, that it would be uncomfortable ... I think I had enough information." Of the pain she experienced during the insertion of her Kyleena in a GP clinic, Selena, aged 36, reported "So I would say it was a fairly painless experience for me but again I've had two children."

However, of participants who experienced pain exceeding their expectations ($n = 9$) all described a discrepancy between the description of pain provided by their health care provider and their experience. Kate, aged 25 who had an unsuccessful Mirena insertion at a gynecology clinic, reported that "All of the information...was very minimized, that it wouldn't be too bad ... only

TABLE 1 | Demographic characteristics of participants who described their experience of intrauterine insertion, Australia, 2023 (*N* = *18*).

Characteristics	Participants (*n*)
Age in years, mean (range)	30.6, (23–43)
Ethnicity (as self-described by participants)	
Caucasian Australian	13
Aboriginal and/or Torres Strait Islander	2
European Australian	1
New Zealand	1
Northern European	1
State/Territory of residence	
Victoria	7
New South Wales	3
South Australia	1
Western Australia	2
Australian Capital Territory	1
Queensland	1
Tasmania	3
Employment	
Full time	7
Part time/casual	7
Unemployed	4
Relationship status	
Married	5
In a relationship	9
Single	4
Parity	
Parous	6
Nulliparous	12
IUD type used	
Copper IUD	4
Mirena	11
Kyleena	3

need Panadol, it's really quick." Kate also suffered from a history of ovarian cysts and painful periods. At the time of insertion Kate was experiencing an increase in her symptoms and later reported "I think I really just wasn't prepared for it [the pain], I think I might have considered not getting it while I was in the middle of a flare up." Bridget, aged 32, who had her Mirena inserted in a GP clinic reported her GP's description of IUD insertion "Like they described that it might be like period cramping, it was not like period cramping." Most of these participants described the pain they experienced as moderate to severe, with some describing the experience as "traumatic," or like they had "been assaulted," "violated," or "abused." For example, Bridget later described her experience as "[K]ind of like I'd been abused, and I wanted aftercare, like I'd had a traumatic event happen." Jennifer, a 30-year-old who had her Copper IUD inserted in a GP clinic described her experience as "[L]ike I'd been assaulted in a way, like I know that sounds significant, and is a pretty heavy word but … I think it [the insertion] had similar impacts."

Some participants also reported vasovagal reactions or side effects during insertion, most of whom were not aware that this could happen, and subsequently described their surprise and fear. Sophie, aged 27, who had her Copper IUD insertion at a sexual health clinic reported "I felt like I was going to vomit, and I was sweating, but also cold" and went on to say "I wish they told me about the vasovagal thing, because it was scary when that happened and I didn't know what was going on". Amy, aged 43, who had her Mirena inserted in a GP clinic described her vasovagal experience "I was vomiting, I fainted …, it was horribly unpleasant, I was crying. It was an hour and a half before I could even get off the bed." Amy went on to reflect on how knowing her normal reaction to stress may have helped her to better prepare for this experience, "I have a history of being a thrower upper. So hey if you tend to react to things like this, this is a genuine possibility of this might happen."

3.3 | Unexpected Consequences

Most participants who reported moderate to severe pain exceeding their expectations described how this experience impacted their mental, emotional, and physical wellbeing. For some participants the impacts were practical and occurred soon after insertion, for example interfering with their ability to travel home and go to work. As Lucia aged 23 who had her Mirena inserted at a GP clinic, described "[The GP] said most women drive themselves home … most women would be able to go to work like 2 h later … I absolutely would not have been able to drive myself home." Bridget also described how the experience impacted her relationship with her body "To be honest I was kind of scared to touch my own vulva, for maybe a good 2 weeks. Yeah, I was a little bit terrified." Others described a fear of using tampons and impacts on their intimate relationships. Some described longer lasting emotional and physical impacts. For example, Sophie said "I've even since then [been] too scared to go for, like I've been very bad and not going for a pap smear like I'm too scared to even go for a pap smear now." Jennifer also described longer lasting emotional impacts of her insertion experience, "I just felt frustrated and pretty upset but I didn't know where to put that emotion towards … so yeah, physically, not great for about two weeks and then emotionally for about a month." Despite these participants describing overwhelmingly negative experiences during IUD insertion, most reported feeling either neutral or positive about their IUD, had continued to use their IUD, and planned to have their IUD replaced on expiration. However, many reported fear of re-insertion with some hoping to have this under a general anesthetic or with alternative pain management options. Jennifer had her Copper IUD removed due to painful periods and was reluctant to attend her appointment to have a hormonal IUD inserted under general anesthesia, "I'm

still like really nervous and pretty hesitant to do anything in that region ... even though I was going under [general anesthesia] and I would have, you know so much more support, and I felt way more educated about the experience, I was still super anxious that there would be any pain so I actually just haven't gone through with it."

3.4 | Improving Experiences

Most participants who experienced pain that exceeded their expectations during IUD insertion reflected on how their experiences could have been improved. Most participants described receiving little or no information about their pain management options and wanted their health care provider to be up front about potential pain. As Sinead, aged 29, described, "Be honest that it could you know range from very mild discomfort to not feeling anything to it can be very painful ... I would have liked if they had said something like try, you know, take an anti-inflammatory before you come, numbing gel is an option and presenting that option of general anesthetic." Despite this, most participants did not blame their health care provider for their experiences. Participants cited time constraints facing health providers and highlighted their clinician's empathy towards them during their IUD insertion. Some women conceptualized that they or their body were at fault for their experience, rather than their health care provider, as Amy said, "There's nothing that could have predicted my body's reaction and there was no way anyone could have guessed that that's what was going to happen."

None of our participants were offered the option of having a support person present during the procedure. However, some participants specifically discussed how the presence of a support person during insertion or having someone provide transport to and from their appointment improved or may have improved their experience. Bridget reported how a support person could have played an important role during her IUD insertion, "I feel like for me personally with having mental illnesses, it might have been better if I'd had someone like a close friend or loved one in the procedure room." Danika, aged 24, had decided she would like her partner to be present during her Mirena insertion, unfortunately her health provider did not acknowledge the importance of her partner's presence and commenced the procedure without him, negatively impacting her experience, "We talked about me wanting his presence there during the insertion because I was expecting to be in pain, but she started the procedure without my consent." Lucia reflected on how her partner provided important practical assistance in driving her home after her IUD insertion "My partner came with me and I'm so glad he did because I absolutely would not have been able to drive myself home."

4 | Discussion

Findings from this study indicate that contraceptive users have varied experiences during IUD insertion. While most participants experienced mild to moderate pain, a significant proportion of participants reported experiencing pain that exceeded their expectations; several described this as a traumatic experience. Participants also reported inconsistency in the pain management options provided to them and not all participants were warned that insertion could be severely painful or of the chance of vasovagal reactions post insertion. Our findings also highlight the non-standardized approach health care providers in Australia currently take when providing information about IUD insertion and regarding pain management options. The lack of consensus regarding the most effective medications to manage IUD pain is a topic that warrants further investigation. According to Gemzell-Danielsson and colleagues, those who have a history of dysmenorrhea, not given birth vaginally, greater anxiety regarding potential pain, or experienced painful gynecological procedures in the past may experience higher levels of pain during insertion [9]. Negative perceptions of IUD insertion can also increase experiences of pain [13]. These patients should be identified during pre-insertion counseling and these risk factors should be considered when discussing pain management options. That healthcare providers have been shown to underestimate the pain experienced by their patients during insertion should also be considered by those providing care [7].

While the FSRH in the UK advises that experiences of pain during IUD insertion can range from no pain to severe pain, they also report that most IUD users experience mild to moderate pain even without pain medication [3]. However, studies referenced within these guidelines found that 16%–33% of IUD users reported their pain as between 7 and 10 (10 being the highest level of pain) on a visual analogue scale [7, 8]. Moderate to severe pain in nulliparous women is a common experience [14] and nulliparous women have been shown to have accurate expectations of pain during IUD insertion [15, 16]. The FSRH also report that after 5 min mean pain scores are low, [3] however this does not acknowledge the impacts that unexpected severe pain during the insertion process can have on contraceptive users long-term as described in our results.

Among those who described pain exceeding their expectations during IUD insertion in our study, most reported feeling neutral or positive about their IUD and planned to continue to use their device, a finding that aligns with other studies [15–17]. This may have implications for how the acceptability of IUDs is currently measured. Levels of acceptability are typically measured by the number of users who continue to use the device beyond 12 months, and studies often show high levels of acceptability [18, 19]. However, by discounting insertion experiences when measuring acceptability, we risk missing the impact of these experiences on contraceptive users, including a fear of other gynecological procedures, mistrust of health providers, and impacts to intimate relationships found in this and other recent studies [17, 20]. Further, studies have shown that friends and family are important sources of contraceptive information and have the ability to shape contraceptive decision-making. Hearing about painful experiences of IUD insertion may deter other contraceptive users from using this form of contraception [21].

Non-pharmacological interventions to reduce pain during IUD insertion also warrant further investigation [22]. In this study, some participants described how support persons could reduce experiences of emotional distress and provide practical assistance such as transport to and from the clinic. The presence of support persons has been shown to improve emotional

wellbeing during abortion and birth and so should be considered in the context of IUD insertion [23, 24].

4.1 | Limitations

Although survey respondents invited to participate in this qualitative study were selected at random, it is possible that those who had greater interest in this topic were more likely to participate. This qualitative study is not intended to represent the experiences of all IUD users but rather explore in detail the experiences of a group of women using an IUD. This study did not capture the experiences of those from culturally and linguistically diverse backgrounds. Participants were invited to describe all past IUD insertion experiences, and this could result in recall bias. The survey from which we recruited participants used social media advertising and may have resulted in a sample that had higher access to technology and the internet. The primary researcher is a white Australian woman of reproductive age. Being of similar age to participants may have strengthened rapport building with participants and positively assisted data collection.

4.2 | Conclusion

Patients in our small qualitative study in Australia who experienced pain exceeding their expectations during IUD insertion felt unprepared and this can have unintended physical and emotional impacts. Pre-insertion counseling with health care providers should aim to prepare patients by including information regarding the range of pain experiences possible during insertion (no pain to severe pain), the risk of vasovagal reaction, and all available pain management options. Despite this, the experience of pain exceeding expectations did not deter continuation of IUD use.

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Conflicts of Interest

The authors declare no conflicts of interest.

References

1. J. Trussell, "Contraceptive Failure in the United States," *Contraception* 70, no. 2 (2004): 89–96.

2. S. Pearson, C. J. Boerma, K. McNamee, and D. Bateson, "Long-Acting Reversible Contraceptives: New Evidence to Support Clinical Practice," *Australian Journal of General Practice* 51, no. 4 (2022): 246–252.

3. "FSRH Guideline (March 2023) Intrauterine Contraception," *BMJ Sexual & Reproductive Health* 49, no. Suppl 1 (2023): 1–142.

4. "Royal Australian College of General Practitioners. Intrauterine Device/System: Checklists and Patient Confirmation Form."

5. L. M. Lopez, A. Bernholc, Y. Zeng, et al., "Interventions for Pain With Intrauterine Device Insertion," *Cochrane Database of Systematic Reviews* 2015, no. 7 (2015): 19.

6. CDC, "Intrauterine Contraception Online: Centers for Disease Control and Prevention," 2016, https://www.cdc.gov/reproductivehealth/contraception/mmwr/spr/intrauterine.html#easeIUD.

7. H. Akintomide, N. Brima, R. D. Sewell, and J. M. Stephenson, "Patients' Experiences and Providers' Observations on Pain During Intrauterine Device Insertion," *European Journal of Contraception & Reproductive Health Care* 20, no. 4 (2015): 319–326.

8. I. A. Chaves, T. Baêta, G. B. Dolabella, et al., "Pain Scores at the Insertion of the 52 MG Levonorgestrel-Releasing Intrauterine System Among Nulligravidas and Parous Women," *European Journal of Contraception & Reproductive Health Care* 26, no. 5 (2021): 399–403.

9. K. Gemzell-Danielsson, J. T. Jensen, I. Monteiro, et al., "Interventions for the Prevention of Pain Associated With the Placement of Intrauterine Contraceptives: An Updated Review," *Acta Obstetricia et Gynecologica Scandinavica* 98, no. 12 (2019): 1500–1513.

10. ABC, "Having an IUD Inserted Can Be Excruciatingly Painful. Why Aren't Women Being Warned or Given Stronger Pain Relief?," 2022, https://www.abc.net.au/news/2022-10-31/what-can-be-done-to-make-iuds-less-painful/101584670.

11. V. Braun and V. Clarke, "Reflecting on Reflexive Thematic Analysis," *Qualitative Research in Sport, Exercise and Health* 11, no. 4 (2019): 589–597.

12. QSR International, *NVivo Qualitative Data Analysis Software* (QSR International Pty Ltd, 2012).

13. Y. Akdemir and M. Karadeniz, "The Relationship Between Pain at IUD Insertion and Negative Perceptions, Anxiety and Previous Mode of Delivery," *European Journal of Contraception & Reproductive Health Care* 24, no. 3 (2019): 240–245.

14. D. G. Callahan, L. F. Garabedian, K. F. Harney, and A. D. DiVasta, "Will It Hurt? The Intrauterine Device Insertion Experience and Long-Term Acceptability Among Adolescents and Young Women," *Journal of Pediatric and Adolescent Gynecology* 32, no. 6 (2019): 615–621.

15. N. Brima, H. Akintomide, V. Iguyovwe, and S. Mann, "A Comparison of the Expected and Actual Pain Experienced by Women During Insertion of an Intrauterine Contraceptive Device," *Open Access Journal of Contraception* 6 (2015): 21–26.

16. A. Narayan, J. Sheeder, and M. Guiahi, "Association of Anticipated Insertional Pain With Intrauterine Device Initiation," *Journal of Adolescent Health* 63, no. 1 (2018): 37–42.

17. N. Taghinejadi, H.-M. van der Westhuizen, F. I. Ayomoh, W. Ahmed, T. Greenhalgh, and A.-M. Boylan, "Pain Experiences During Intrauterine Device Procedures: A Thematic Analysis of Tweets," *BMJ Sexual & Reproductive Health* 50 (2024): 1–7.

18. E. Weisberg, D. Bateson, K. McGeechan, and L. Mohapatra, "A Three-Year Comparative Study of Continuation Rates, Bleeding Patterns and Satisfaction in Australian Women Using a Subdermal Contraceptive Implant or Progestogen Releasing-Intrauterine System," *European Journal of Contraception & Reproductive Health Care* 19, no. 1 (2014): 5–14.

19. D. Bateson, C. Harvey, L. Trinh, M. Stewart, and K. I. Black, "User Characteristics, Experiences and Continuation Rates of Copper Intrauterine Device Use in a Cohort of Australian Women," *Australian and New Zealand Journal of Obstetrics and Gynaecology* 56, no. 6 (2016): 655–661.

20. J. Wu, E. Trahair, M. Happ, and J. Swartz, "TikTok,# IUD, and User Experience With Intrauterine Devices Reported on Social Media," *Obstetrics & Gynecology* 141, no. 1 (2023): 215–217.

21. C. Dalessandro, R. Thorpe, and J. Sanders, ""I Talked to a Couple of Friends That Had It": Informal Feminized Health Networks and

Contraceptive Method Choices," *Social Science & Medicine* 286 (2021): 114318.

22. L. Nguyen, L. Lamarche, R. Lennox, et al., "Strategies to Mitigate Anxiety and Pain in Intrauterine Device Insertion: A Systematic Review," *Journal of Obstetrics and Gynaecology Canada* 42, no. 9 (2020): 1138–1146.e2.

23. A. L. Altshuler, A. Ojanen-Goldsmith, P. D. Blumenthal, and L. R. Freedman, ""Going Through It Together": Being Accompanied by Loved Ones During Birth and Abortion," *Social Science & Medicine* 284 (2021): 114234.

24. M. A. Bohren, B. O. Berger, H. Munthe-Kaas, and Ö. Tunçalp, "Perceptions and Experiences of Labour Companionship: A Qualitative Evidence Synthesis," *Cochrane Database of Systematic Reviews* 3, no. 3 (2019): 29.