Portfolio Volume 1: Major Research Project

Women's Negative Experiences of IUD Procedures

Sabrina Pilav

19000216

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Abstract

The use of Long-Acting Reversible Contraception has been steadily increasing due to the promotion of its benefits as a contraception choice. The most used devices are the levonorgestrel intrauterine system (IUS) and the copper intrauterine device (IUD). Studies have found that women can experience pain and distress in procedures, but there has been a lack of in-depth research to investigate this further. This study explores women's negative experiences of IUD procedures within UK based health settings. Twenty women took part in semi-structured interviews about their experiences. Data were analysed using thematic analysis and found six themes: (1) clinician interpersonal skills, (2) autonomy and vulnerability, (3) pain experiences and pain management, (4) psychosocial impact, (5) perception of clinicians and services and (6) gender roles and empowerment. The results provided rich, in-depth accounts of what women can find distressing or painful and how this can be mitigated in practice. Clinical implications include detailed assessment, empowering patients, multi-modal pain management and recommendations for trauma informed practice.

1. Introduction

1.1 Overview

This research focuses on women's negative experiences of intrauterine device (IUD) procedures. The epistemological positioning of the researcher is stated first, alongside an explanation of relevant terminology. This is followed by the main body which includes several subsections of concepts and literature relevant to women's health, IUD experiences and guidelines and situating this in the wider context of the NHS.

1.2 Language and terminology

1.2.1 Women / woman

The term women/woman will be used for the purpose of this review due to it being common terminology in the field of women's health and gynaecology. However, this is not to exclude people with wombs, trans women or those that identify as non-binary (Becker, 2023; Meyer, 2015). The term is intended to encompass all women and the historical oppression they have experienced as well as the lack of equity experienced by many today (Steen, 2020).

1.2.2 Pain

Pain can be referred to as an unpleasant sensory and emotional experience (Cohen et al., 2018). The history of pain has been argued as biased towards women, with women's expressions of pain being doubted and treated differently from men. Pain can be described as multicausal, as it can occur due to biological or psychosocial reasons (Hoffmann & Tarzian, 2001). This term will be used to describe all types of pain experienced, without a predominant focus on the level, due to evidence that suggests women's pain levels are often dismissed or minimised (Samulowitz et al., 2018; Wiggleton-Little, 2023).

1.2.3 Intrauterine devices

Intrauterine systems (IUS) and intrauterine devices (IUDs) can be used to describe both the levonorgestrel intrauterine system, LNG-IUS, which is hormonal, in comparison with the copper IUD, which is non-hormonal (Group, 2008). These abbreviations can be used interchangeably in the literature. In this review, the 'IUD' is being used to refer to both the hormonal and non-hormonal (copper) IUD. Either device can also be referred to more colloquially as the 'coil' (Balderstone, 2022).

1.2.4 Negative experiences

For this study any experiences which would be described as painful, distressing or traumatic in some way will be considered under the umbrella of being 'negative'. Where appropriate, distinctions will be made between these descriptions. The aim of this is to include a variety of experiences as there is little clear evidence describing the nuances during the procedural experience (Daniele et al., 2017).

1.3 Epistemology

My own epistemology within this topic is based on critical realism (Alderson, 2021). Critical realism is rooted in ontological realism which posits the belief that data can tell us about reality, but should not be seen as directly mirroring that reality (Harper, 2011). It recognises that there are universal 'truths' (for example pain) but also that experiences are situated in social constructs or in individual contexts that cannot be removed or seen in isolation from each other (Alderson, 2021). My approach has been to recognise that there are imperfect ways of measuring or understanding these experiences and to try to work as a reflexive clinician to present participants' experiences in ways that I believe depict their reality and context (Clarke & Braun, 2021). Within my area of focus, taking a critical realist stance means that the data have been viewed as depicting a form of reality (for example pain) but with other factors (previous experiences of pain, history of trauma, personality types, relationship to authority and medicine) or socially constructed ideas (gender roles, sex and menstruation as shameful or a point of judgement) potentially influencing this experience. The reason for taking a critical realist stance rather than a social constructionist stance was due to the limits of constructionism when used alone, rather than in conjunction with realism. For example, while constructionism provides opportunity for bringing forward social constructs, it

can be difficult to operationalise and decide which constructions to focus on to bring change in practice, a crucial step in psychological health research (Pocock, 2015).

Alongside this, I take this epistemological position with a feminist lens (Code, 2014; Kramer, 2005; Tasca et al., 2012). This is relevant to my research due to feminist epistemology often focusing on areas such as gynaecological examinations (Murray & Chamberlain, 1999) and evidence that suggests women's experiences of healthcare services lack equity (Gilbert et al., 2021). In addition to this, feminist theory argues the importance of using emotions to assist in the understanding of a situation, which is particularly relevant in this project in understanding experiences that may involve heightened emotions and responses (Narayan, 2004). I also believe my own identity as a cis-gender female (Cava, 2016) positions me in a way that is naturally protective towards women and experiences of harm in healthcare.

1.4 Reflexivity and insider perspective

I was drawn to this topic area partly due to my own interests in women's health and inequalities, as well as my own experience of having a coil (Breen, 2007; Hill & Dao, 2021; Mercer, 2007). While I did not experience my procedure to be traumatic, I understood and deeply empathised with women who have had these experiences. I was aware of how these feelings of relating to my participant group could affect the quality and integrity of the research so I used bracketing as a technique to assess my own assumptions, often reexamining these and any meaning that may be imposed on the data as a result (Fischer, 2009).

Reflexivity in research is defined as a process of observing our emotions and examining our self-awareness (Trainor & Bundon, 2021). It is argued that during these processes of deep introspection, one can deconstruct one's own impact on the research process (Hill & Dao, 2021; Sherry, 2013; Trainor & Bundon, 2021). I felt it was important to practice reflexivity throughout this project in order to continually be aware of my pre-conceptions,

knowledge and communication when approaching this topic area (Pezalla et al., 2012). This was supported by using reflective journalling (see appendix A), meeting with both experts by experience (EbEs) and consultants that were experts in different fields of women's health. The meetings provided practical opportunities to use bracketing (Fischer, 2009; Tufford & Newman, 2012) at different stages of the research and to assess how I understood the topic and subsequent data (see section 3.9 in methodology and appendix B for details and examples of this).

1.5 Long-Acting Reversible Contraceptives (LARCs)

Long-Acting Reversible Contraceptives (LARCs) is an umbrella term referring to several contraceptive types that once in place, provide consistent pregnancy prevention over months or sometimes years. LARCs include: IUDs and IUSs, which are hormonal (LNG IUS) and non-hormonal (copper IUD) and are inserted into the uterus; implants, which are inserted subdermally (Curtis & Peipert, 2017); and injectables. Methods that are deemed to be long acting are required to be administered less than once per cycle or month (Arrowsmith et al., 2014).

LARCs were described as early as the 1900s with initial devices being made of contraceptive rings. Injectable devices were developed in the 1970s, with an aim to create longer acting contraceptives that would be formulated to last between 3-6 months (Halpern et al., 2015). LNG IUD devices were developed in 1986, becoming approved by the Food and Drugs Administration (FDA)¹ in 2000 (Bilgehan et al., 2015). Similarly, copper IUD devices were approved in 1988 (Bahamondes et al., 2020). During the mid 1970s and 1980s, IUD use drastically decreased due to issues with specific IUDs such as the Dalkon

¹ The FDA is an agency of the Department of Health and Human Services in the US and are responsible for ensuring the safety and efficacy of human and animal drugs.

Shield, which was linked to pelvic inflammatory disease and septic abortions (Cheng, 2000). In the UK, contraceptive implants have been licensed for use since 1991 (French et al., 2020) and LNG IUD devices have been licensed for use since 1995 (Guidance, 2004).

The cost effectiveness of LARCs has been well-cited in literature (Mavranezouli, 2008; Trussell et al., 2009). LARCs have also been encouraged due to their efficacy, long term contraceptive protection and non-user dependency (Wu et al., 2018). In terms of patient preferences of LARCs, there is evidence which suggests copper IUDs are the most preferable due to being non-hormonal, as well as the fact that they last up to 12 years. Implants also tend to be seen more favourably compared to IUDs due to placement and perception that the process of removal is less invasive (Manzer et al., 2022). Further research has found women that tend to favour LARCs are often over the age of 30, more likely to be white and in long-term relationships (Paul et al., 2020).

1.5.1 LARC policy initiatives

Recent figures suggest that LARC uptake in developed countries is lower than those in developing countries (Shoupe, 2016). LARC uptake in the United Kingdom (UK)² stands at around 12% for women aged 16-49, compared to 25% for oral contraceptives and 25% for condom use (NICE, 2005).

LARCs are therefore considered to be underused, and clinicians are often encouraged to promote LARCs as a way of dealing with issues such as unplanned pregnancies (Wu et al., 2018). This was trialled through a number of US-based initiatives from 1999 to 2018, which were set up to encourage their use (Aligne et al., 2020; Connolly et al., 2014; Horvath et al., 2020; Logan et al., 2022). These initiatives were created to share

² The UK consists of England, Wales, Scotland and Northern Ireland.

knowledge and resources for clinicians, and to help policy makers and healthcare systems, with an overall aim to improve accessibility and increase the use of LARCs (Horvath et al., 2020). Some initiatives focused on specific groups such as adolescents, with overarching aims to use LARCs to help to prevent unplanned teenage pregnancy (Aligne et al., 2020) as well as initiatives which were targeted at postpartum women (Logan et al., 2022).

Similar initiatives were set up in the UK. This included the pay for performance scheme where primary care services were offered financial benefits if clinicians gave information on LARCs to over 90% of patients coming in for contraceptive devices. The impact of this programme led to a 4% increase in LARC prescribing rates (Arrowsmith et al., 2014; Ma et al., 2020). Further schemes such as the 'Teenage Pregnancy Strategy' and the National Strategy of Sexual Health and HIV were launched to modernise sexual health services and address the fact that in the 1990's, Britain had the highest unplanned pregnancy rates in Western Europe. This led to fewer abortions and through additional training and funds, increased the provision of LARC's in primary care (Connolly et al., 2014).

1.5.2 Current guidelines on LARCs

The National Institute for Health and Care Excellent (NICE) guidelines for LARCs state the following key points: they should be offered to all women requiring contraception that find it acceptable, women should receive detailed verbal and written material concerning LARC methods, counselling should be sensitive to cultural and religious needs, medical history should be taken as part of the assessment, and women should be screened for STI risks. In relation to staff, it states clinicians should be able to help women assess the risk/benefit profile of the chosen LARC. Those involved in insertion or removal should be trained clinicians who develop their skills at least once a month (NICE, 2005).

Further guidance has suggested LARC insertion can be beneficial post-partum as it is described as convenient for both clinicians and women (Kroelinger et al., 2021). However,

Cameron et al. (2017) found evidence that following childbirth, women felt discussions around contraception were given too soon after their birth experience. They also suggested women were automatically offered LARCs without proper consultation and with assumptions made that they would experience lower pain thresholds after childbirth. There is also evidence to suggest expulsion rates for IUD devices can be higher when inserted immediately post-partum (NICE, 2005).

1.5.3 Clinicians' experiences with LARCs

A review into clinicians' experiences with LARCs found that while they routinely included LARC as a part of their routine counselling, they prescribed oral contraceptives more commonly (Berlan et al., 2017; Welsby et al., 2020). The LNG IUD was described to be the second most prescribed LARC (Buhling, Klovekorn, et al., 2014), followed by approximately half of the studies reporting prescribing the implant (Berlan et al., 2017; Luchowski et al., 2014) and none of the studies reporting prescribing the injection (Buhling, Klovekorn, et al., 2014; Welsby et al., 2020). Studies also reported clinicians were more likely to refer to other services if they were not familiar with particular LARC methods as well as if patients reported menstrual cycle concerns. Clinicians stated they often experienced time pressures involving LARC counselling (Welsby et al., 2020).

As counselling of LARCs is often recommended to young women (Biggs et al., 2020), clinicians reported grappling with their own perception of wishing to persuade young women to use a LARC method while not pressuring them to do so (Biggs et al., 2020). However, research looking at attitudes towards LARCs found paediatricians did not support LARC use in adolescents. Some described viewing the implant more favourably than the IUD, often citing concerns about risk and side effects of LARCs in general (Berlan et al., 2017). Similarly, research has found clinicians often have particular concerns with LARC use in younger women due to perceptions that they are more likely to have multiple partners and may therefore put themselves at risk (Kavanaugh et al. 2013).

1.5.4 Women's experiences with LARCs

Some evidence has shown a lack of personalised care and instances of bias in practice (Gomez et al., 2014). Patients have reported feeling pressured to make contraceptive decisions, experiencing little control in the decision-making process (Waller et al., 2017). Research involving minoritised women has found that women have felt pressured to agree to methods which conflict with their own judgment and undermine their decision making, often leading to immediate discontinuation (Gomez & Wapman, 2017). This reduced sense of autonomy is further shown in examples where clinicians have been reluctant to remove IUDs when patients have requested it (Biggs et al., 2018; Manzer & Bell, 2022; Manzer et al., 2022). There is evidence of clinicians minimising patient-reported side effects and declining to remove IUDs for as long as up to a year, if patients reasoning isn't deemed to be sufficient (Amico et al., 2018; Amico et al., 2020; Biggs et al., 2020).

While there are complex social factors at play, evidence shows that unplanned pregnancy is disproportionately higher among women from less privileged backgrounds (Senderowicz, 2019). Women deemed to be deprived are also more likely to be prescribed LARCs (Pasvol et al., 2022). Targeting these populations with the promotion of LARCs needs to be thoughtfully considered as women can be discriminated against due to their statistical profile, with little regard for their own preferences and priorities (Geronimus, 2003). Furthermore, research has shown that individuals who are white and perceived to be of 'high social status' are less likely to be recommended LARCs compared to women who are black or Latina, or deemed as 'low status' (Dehlendorf et al., 2010). This is concerning given the recent history of coercion of both minoritised and poor women (Freedman, 2023; Johnson, 2013).

Overall, while the promotion of LARCs can provide further information and options for women across the lifespan, the sensitivity in how this is communicated and treated in counselling by clinicians is paramount. Further research has found the current approach to

promoting LARCs and counselling have done little to prevent unplanned pregnancies, with rates rising among disadvantaged women in recent years (Higgins, 2014). This may give evidence for a need to consider current approaches, particularly if they have been found to be contradictory to the original aims.

1.6 The IUD

The IUD or IUS are long term, reversible family planning methods which either contain copper or levonorgestrel. They prevent pregnancy for up to 12 years although the way they do this has been difficult to identify. Literature has found a range of explanations including copper ions being toxic to sperm, and levonorgestrel altering cervical mucus and therefore affecting the number of sperm being able to reach the fertilisation stage. It has been suggested that the levonorgestrel also affects the development of the embryo as well as creating a more hostile environment for said embryo implanting (Group, 2008). Overall, IUDs appear to act as a contraceptive at different stages of the fertilisation process, but clarifying this is difficult to achieve with understandable ethical implications of such research (Group, 2008). The IUD is considered to be more effective than other types of contraceptives as user compliance is not required (Mavranezouli, 2008; Rosenberg et al., 1995).

Further to contraceptive effects, the IUD has also been used to effectively treat a range of gynaecological conditions (Salma et al., 2014), including endometriosis (Ørbo et al., 2014). It has been deemed to be helpful in reducing menorrhagia (Apgar et al., 2007) and dysmenorrhea (Imai et al., 2014) as well as providing an alternative to hormonal contraceptive methods through the use of the copper coil (IUD) (Acuna, 2021; Sivin & Batár, 2010). A further benefit, and one of the most promoted, is the cost effectiveness of the IUD. The IUD has been identified as a more cost-effective form of contraceptive than male condoms or other oral contraceptives, even when accounting for short term use (due to factors such as discontinuation) (Mavranezouli, 2008).

However, the IUD has been cited to have some disadvantages. Depending on healthcare systems, upfront costs of LARCs such as IUDs can be high (Mavranezouli, 2008). This may discourage or limit their use due to funding constraints for clinics or financial constraints for patients (Boydell et al., 2022; Kavanaugh et al., 2011; Kilander et al., 2017; Morse et al., 2012b). IUDs are also associated with a 20% increase in the risk of ectopic pregnancy, if a pregnancy occurs with the IUD in situ (Group, 2008).

Recent data suggests that within the UK, only around 5% of women aged between 16-49 use the IUD (Asker et al., 2006). The uptake of IUDs is also lower in the global north compared to the global south (Mavranezouli, 2008). The IUD has a high discontinuation rate with it being removed in up to 50% of all patients within the first 5 years of fitting (Group, 2008). Discontinuation reasons include changes in bleeding patterns, experiences of pain, and pregnancy planning (Amico et al., 2020; Costescu et al., 2022). Further reasons for discontinuation could involve complications related to the device and insertion procedures including perforations, pain and expulsions. Expulsions³ are most likely to occur in the first 3 months following insertion and occur in approximately 20% of women, commonly during their menstrual cycle (Keenahan et al., 2021).

In terms of user rates in different groups, evidence suggests the IUD is less frequently used by nulliparous⁴ and younger women compared to parous⁵ women and women who are older. One reason for this may be due to expulsion rates being higher in younger women, which may affect continuity or clinicians' risk assessments about suitability (Lohr et al., 2017; Madden et al., 2014). This may also be influenced by misconceptions around who the IUD is suitable for which can be held by both patients (Daniele et al., 2017; Kirubarajan et al., 2022) and clinicians (Tyler et al., 2012).

³ Expulsion refers to the IUD being expelled from the uterus, either partially or fully.

⁴ Nulliparous refers to women that have never given birth to a child.

⁵ Parous refers to women who have given birth to at least one child.

General perceptions of the IUD have changed over time, possibly reflecting developments in contraceptives (Makkonen et al., 1994). Some perceptions of the IUD are influenced by peer factors, such as knowing someone who has had an IUD (Callegari et al., 2013). Other factors include risks about safety, body placement and the removal process, alongside other more general concerns about using hormonal contraception. Issues of control being taken away from the user were also cited as factors which influenced perceptions of the IUD as a potential method (Manzer et al., 2022).

1.6.1 Patient IUD experiences

Patient experiences of IUD procedures continues to be an under researched topic, despite negative experiences during coil insertion receiving media attention in the last few years (BBC, 2021; Moran, 2021). However, of the literature that does exist, the majority has been quantitative with a lack of qualitative, in-depth evidence (Balderstone, 2022; Bayer et al., 2012; Callahan et al., 2019).

1.6.1.1 Insertion experiences

Most of the research in this area focuses on pain experiences during insertion. Evidence into insertion experiences found 59% of women left their appointment in pain with 34% experiencing nausea or vomiting and 34% experiencing dizziness or fainting. Further to this, 62% of women reported they were not offered pain relief during their insertion procedure (Balderstone, 2022). Additionally, research looking at adolescent patients found they experienced more pain than they had expected as well as having less satisfactory pain management, with 41% reporting their insertion procedure experience decreased the likelihood of using the device again (Callahan et al., 2019).

In some cases when high levels of pain at insertion were experienced, women were described as still giving generally positive descriptions of the procedure (Brockmeyer et al., 2008). This could indicate that women may be tolerating painful procedures for lack of a better choice or there may be other factors that make them regard the overall procedure as positive. A Randomised-Control Trial (RCT) looking at experiences of 200 nulliparous women who experienced moderate pain, with higher anxiety levels being linked to higher pain levels. Alongside this, 73.9% of patients received no pain relief prior to the procedure (Ribeiro et al., 2021). It is worth noting that some research into IUD experiences often declares conflicts of interest, with authors being linked to clinicians or distributers of the devices (Beckert et al., 2020; Ribeiro et al., 2021).

1.6.1.2 Removal experiences

Recent research highlights how clinician-patient interactions are still entrenched in hierarchical structures despite more models based on patient-centered care (Berndt & Bell, 2021). For example, research which looked at experiences of IUD removal found patients often experienced resistance from clinicians (Amico et al., 2016; Amico et al., 2020). Experiencing pressure to continue with their method for longer than intended caused women considerable distress, a sense of loss of trust in their clinician (Caddy et al., 2022) and a lack of validation, feeling that their symptoms meant removal was not warranted (Amico et al., 2016; Higgins et al., 2016).

This has arguably led to a rise in interest of self-removal, alongside factors such as a lack of appointment availability (Stimmel et al., 2022). Self-removal involves women taking out their own IUDs or at times asking someone other than their clinician to remove their IUD in a non-medical setting. Further research has found a factor for deciding to self-remove was due to greater feelings of control in the removal process (Foster et al., 2014) and due to experiences of adverse symptoms (Amico et al., 2020). These ideas of control have been

further cited by women who perceived the IUD negatively as they viewed it as restricting their autonomy due to requiring a clinician for removal (Gomez et al., 2018).

1.6.1.3 Experiences of IUD use

Focus groups looked at adolescent perceptions of the IUD and reported a lack of information provision, with many discontinuing the device due to experiences of adverse symptoms (Schmidt et al., 2015). Further research reported women often waited for long durations for adverse symptoms to ease but eventually felt the side effects they experienced outweighed the benefits of the IUD and decide to discontinue (Caddy et al., 2022).

More recent research has focused on IUD users sharing their IUD experiences via social media. A social media analysis of TikTok, a short video sharing platform, found videos tagged with 'IUD' included mostly negative experiences, highlighting experiences such as pain and other side effects (Wu et al., 2023). A study into YouTube, another online video sharing platform, found one-third of videos sharing negative experiences, most often sharing post-insertion experiences such as bleeding and pain (Nguyen & Allen, 2018). These forms of internet outlets may show a lack of space or perceived trust to discuss these concerns with clinicians. It is also worth considering that those who have had negative experiences may be more likely to share this information, possibly with an aim to receive validation from peers, if it was missing from their clinician (Cronin, 2017).

However, one study reported women found the IUD to be largely positive compared to other methods which interfered with sex or affected their libido (Higgins et al., 2015). Further research has also found women with favourable views of the IUD reported they enjoyed the fact they did not have to think about the contraception once it was in place (Gomez et al., 2018). While the evidence on IUD experiences is mixed, it demonstrates how once the IUD is placed, some women report favourable experiences. Taking into account high discontinuation rates (Amico et al., 2017; Kaneshiro et al., 2020), this may suggest that either counselling practice or procedures are worth investigating in greater depth.

Overall, there has been a lack of in-depth inquiry into clinician's experiences of IUDs as the research that has been conducted has tended to focus on LARCs more generally (Manzer & Bell 2020; Berlan et al., 2017; Biggs et al., 2013; Rubin et al., 2013). Similarly, research on women's experiences of IUDs has tended to be more quantitative (Balderstone, 2022; Bateson et al., 2016; Carr et al., 2018), with less focus on the procedures themselves (Schmidt et al., 2015).

1.6.2 Current IUD guidelines and pain management

Recent changes in guidance for IUDs in the UK were made in May 2024. This includes changes to the length of time IUDs can remain in situ before being replaced, from 5 years previously to 8 years currently (Nash & Thwaites, 2024). Recent changes for pain management during IUD insertion have also been expanded to include some of the following: paracervical blockers, intracervical LA injections, lidocaine spray and other pain-relieving creams. These options are given while acknowledging the evidence on their effectiveness is limited. The guidelines also state the need to discuss pain management and for this to be patient led, with referrals onto teams being provided if specific pain relief options aren't available (Jefferies & Boog, 2023).

There are no current NICE recommendations for the use of analgesia, despite many women experiencing various degrees of pain, dizziness/fainting as well as nausea and vomiting (Balderstone, 2022). Research in the UK found that only a quarter of clinicians routinely used local anaesthetic (LA) with a quarter never or hardly ever using LA specifically for coil insertions (Akintomide et al., 2013). Those that do use LA are more likely to work in specialised services compared to general practice where it was less likely to be used (Akintomide et al., 2013). There may be several reasons for this discrepancy including lack of specialist training, culture of services and availability of pain relief.

Cochrane reviews into pain management for the IUD have been inconclusive due to a variety of contradicting evidence on which pain relief is the most effective to use during

IUD procedures (Mittal & Goyal, 2015; Tangsiriwatthana et al., 2013). Most commonly recommended analgesics such as non-steroidal anti-inflammatories (NSAIDs) were not found to help with pain during placement but were suggested as potentially helpful for post procedure pain (Sandoval et al., 2022). Some evidence looking at analgesic oral tablets found both tramadol and naproxen can relive some pain during IUD insertion, with pain scores being lower in the tramadol compared to the naproxen group (Karabayirli et al., 2012). Similarly, a meta-analysis into paracervical lidocaine was found to reduce visual analogue pain scores (Pergialiotis et al., 2014). However, further research into use of naproxen with intrauterine lidocaine was not found to reduce IUD insertion pain (Miles et al., 2019).

Overall, the evidence for different types of analgesia is contradictory and may depend on a range of patient characteristics. The mode of analgesia used must be carefully considered due to the sensitivity of the area and the potential to cause pain by using injections. It may be more beneficial to view pain management as a multi-modal approach, combining analgesia with non-pharmacological approaches and prioritising the relationship between patient and clinician (McCarthy, 2018; Murty, 2003).

1.7 Gynaecology and health inequity

Women's health is an emerging area of research due to gendered inequalities that exist in health. Gender is understood as a construct based on cultural rules and behaviours concerning what is expected and understood to be the norm for women and men. While biological differences play a part in health outcomes, it is argued that constructs around gender can be the most harmful and lead to inequalities in health (Borrell et al., 2014). Literature has suggested that even young women's books are written in ways that suggest they should be compliant in the face of the 'medical gaze', focusing on women's own perceptions rather than that of the clinicians that are often the ones in power (Cook, 2011;

Morrissey, 2008).

In the UK, 1 in 20 women (aged 30-49) have reported approaching their GP for help with gynaecological problems such as menorrhagia⁶ and 1 in 5 women have a hysterectomy⁷ before the age of 60 (Schifrin, 2001). Inequalities have been documented to exist in both obstetrics, with black women more likely to experience adverse outcomes (MBRRACE-UK, 2015), and within gynaecological cancers, with deprived women experiencing higher instances of endometrial (17% higher) and cervical cancers (65% higher) (Ptacek et al., 2021).

Previous research has outlined that women are particularly vulnerable and may experience distress during gynaecological examinations (Glover et al. 2002; Kimmel et al. 2014). It highlights that a variety of factors such as physical pain, a lack of control (Donovan et al., 2005), a lack of consent and information, as well as unsympathetic attitudes by clinicians, can contribute to psychological trauma or distress (Menage, 1996). Within routine gynaecological appointments such as pelvic exams, research suggests women can experience anxiety which can lead to avoidance in attending appointments (Cook & Brunton, 2015; O'Laughlin et al., 2021). Research has found patients view gynaecological examination as embarrassing (47%), painful (35%) and even traumatic (19%), with less than 50% of patients notifying their clinician of pain during examination (Tancman et al., 2022). Further, research into women's experiences in obstetrics and related gynaecological appointments found they experienced care they perceived to be non-consensual and dehumanising (Keedle et al., 2022). A need to consider trauma informed care has also been highlighted given that women who have experienced previous sexual trauma understandably find gynaecological exams more difficult (Huber et al., 2009). Newer models of care have

⁶ Menorrhagia is described as heavy or prolonged menstrual bleeding.

⁷ A hysterectomy is a medical procedure to remove the uterus.

made suggestions for psychologists collaborating with gynaecologists to help with behavioural aspects of concern and working within a patient-centered model (Poleshuck & Woods, 2014).

1.8 Pain perceptions and experiences

A variety of clinical, experimental and epidemiological studies have suggested women experience and report higher levels of pain than men (Bernardes et al., 2008; Keogh, 2022) and are more likely to be underdiagnosed and undertreated for their pain (Hoffmann & Tarzian, 2001; Wiggleton-Little, 2023). Some research has suggested gendered norms can exist in healthcare where women are labelled as 'emotional' and men are referred to as 'brave' when experiencing pain (Samulowitz et al., 2018). Research which examined nurses beliefs reported that females tolerated pain more and are less sensitive to pain (McCaffery & Ferrell, 1992), whereas males believed they are more tolerant to pain than females (Bernardes et al., 2008; Robinson et al., 2001).

Regarding pain in gynaecology, studies show that women often experience delays in diagnosis and dismissal of endometriosis and of chronic pelvic pain (Hadfield et al., 1996; Husby et al., 2003; Ross et al., 2023). In studies looking at frequently performed procedures such as hysteroscopies⁸, 45% of women reported the pain experienced as a medium or high (Morgan et al., 2004) and pain has been reported to be severe enough to abandon the procedure entirely (O'Flynn et al., 2011).

When considering pain relief, there is little consensus on the best pain relief options for gynaecological procedures such as hysteroscopies, IUD insertions and endometrial ablations. This is

⁸ A hysteroscopy is a procedure where the inside of the uterus is examined using a narrow telescope with a light and camera at the end. It is used to diagnose or treat certain cases of abnormal uterine bleeding.

significant particularly as more of these appointments are being conducted in outpatient and primary care settings and women can experience distress from these procedures (O'Flynn et al., 2011; Riemma et al., 2020; Tangsiriwatthana et al., 2013). Some research has also suggested pain perception can be worsened if anxiety is heightened (Woo, 2010) with evidence also suggesting attention to painful stimuli can worsen pain, rather than anxiety itself (Arntz et al., 1991). Studies using brain imaging has also found activation in the brain's opioid system even when placebo is given, suggesting even the expectation of pain relief can help to alter ones emotional state and therefore pain receptors (Kuehn, 2005).

Further, some studies have also found clinicians to have discrepant pain ratings to their patients (Akintomide et al., 2015). In an analysis of a randomised trial of pain assessment during IUD insertion, clinicians rated pain as 35.5 on average using a 100-mm analogue scale, while patients average rating was 64.8, with further weak inter-rater reliability for the most painful point in the procedure (Maguire et al., 2014). Further evidence has found that male obstetricians and gynaecologists often underestimate their female patients' pain in procedures and these effects are more pronounced among senior clinicians (Miron-Shatz et al., 2020).

Evidence also suggests that many clinicians hold the view that many women will decline even when offered pain medication (Sewell & Vincent, 2013). Similar results can be found for childbirth where some women decline all pain relief and clinicians criticise the practice of offering women a 'pain relief menu' as they believe it undermines them, as they should be encouraged to work with the pain (Lally et al., 2008). This raises further cases of inequity in women's health which could be argued to lead to women internalising that they must learn to experience pain without relief. This can also affect ethnically diverse women unfairly, feeding into further well-documented stereotypes for Black women being deemed 'strong' (Donovan & West, 2015). These examples may further reinforce clinicians beliefs of procedures being less painful or the discrepancies between pain assessments between

patients and clinicians (Akintomide et al., 2015).

Overall, women face a variety of chronic conditions and gynaecological health difficulties that affect them at different stages across the lifespan. The evidence also suggests that women from minoritised and deprived backgrounds can be disproportionately affected (Donovan & West, 2015). Research into pain and the disparities that clinicians and patients report, particularly in a gynaecological setting, warrant further understanding and investigation (Ptacek et al., 2021).

1.9 NHS context

The National Health Service (NHS) in the UK has long been described as being in crisis. Due to funding constraints, staff recruitment and retention issues, patient care often results in long waiting lists for both basic and specialised care (Montgomery et al., 2017). The onset of the coronavirus pandemic led to specialisms such as gynaecology being deprioritised for both routine and non-routine appointments. With only emergency care being provided, waiting times for appointments and services increased significantly (Montgomery et al., 2017).

Previous research has suggested doctors' training can often involve assumptions that the emotional aspects of the work should not be attended to (Pruthi & Goel, 2014). Training doctors to have 'detached concern' has been described as a way of allowing them to be empathic without becoming emotionally involved (Lief, 1963). This can however lead to a depersonalisation of the relationship between the clinician and the patient while some argue compassion and humanisation is key in teaching doctors how to cope with emotionally challenging work as well as helping to reduce burnout (Halpern, 2001; Pruthi & Goel, 2014).

Within clinical practice, obstetricians and gynaecologists have been experiencing burnout and difficulties managing wellbeing, leading to defensive practice and affecting patient care (Bourne et al., 2019). Similar experiences have been reported by those recently

entering the profession, with up to 30% of obstetric and gynaecology trainees leaving specialist training due to experiences such as burnout, feeling undervalued, struggling with toxic cultures, and a lack of professional identity (Chakrabarti & Markless, 2022). Reports of toxic cultures were also found in research with cases of consultants in obstetrics and gynaecology reporting bullying by those more senior to them. Further to this, 44% of consultant doctors described feeling consistently bullied or undermined, which led to highly concerning outcomes such as suicidal ideation and effects on health and family life (Shabazz et al., 2016).

Current demand for outpatient appointments in both obstetrics and gynaecology have increased and stand at roughly 120 million appointments per year. This demand, alongside the difficulties detailed by clinicians, depict a concerning picture for the quality of patient care in this area (Kershaw et al., 2022).

2. Systematic Literature Review

2.1 Overview

This chapter reports on a Systematic Literature Review (SLR). SLRs are a rigorous approach to searching and synthesising evidence to answer a particular question, in a way that is reproducible (Lame, 2019; Nightingale, 2009). This chapter details the aims of the research alongside the methodology, synthesis and discussion, including implications of the review.

2.2 Aim

The aim of this SLR was to identify healthcare clinicians' perceptions and clinical experiences of IUDs.

Clinicians' perceptions and experiences encompass, but are not limited to, knowledge, attitudes and beliefs about the IUD (including about acceptability and continuation), experiences of IUD counselling, insertion and removal, and decision making around the use of the IUD. The review provides a quality assessment of the literature, presents a synthesis of the most common themes, and identifies gaps for future research. The review has been reported as recommended by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021) and is registered on the international prospective register for systematic reviews (Prospero: CRD42023480723).

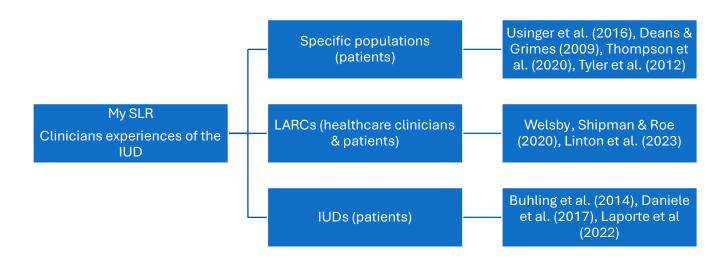
2.3 Methodology

2.3.1 Scoping review

In order to understand the existing research in this broad area, an informal scoping exercise (Munn et al., 2018) was conducted before deciding on a research question (please see figure 1 for examples found). During this process, several information sources were used (Google Scholar, PubMed and Prospero) to identify what the existing literature had found and if there were any gaps in the literature. This process helped to identify a number of Prospero registered projects specific to IUDs (CRD42016036167, CRD42022308394, CRD42024496100) and published studies looking at specific populations such as nulliparous women, adolescents and postpartum women, among others (Deans & Grimes, 2009; Thompson et al., 2020; Tyler et al., 2012; Usinger et al., 2016).

Other studies focused specifically on LARCs, mostly concerning barriers to access and how best to increase provision (Linton et al., 2023; Welsby et al., 2020). Reviews that were more specific to IUD topics tended to focus on patients (Buhling, Zite, et al., 2014; Laporte et al., 2022) with some examples of combined (patients and clinicians) reviews such as one global review focused on improving the promotion of IUDs (Daniele et al., 2017). Overall, it appeared that most of these focused on areas such as access and barriers to IUDs, promotion of IUDs and topics involving reaching specific populations (see Figure 1). There was however a gap in the literature concerning clinicians' experiences, perceptions and challenges related to IUDs, through in-depth forms of qualitative analysis, specifically in reference to health contexts similar to the UK.

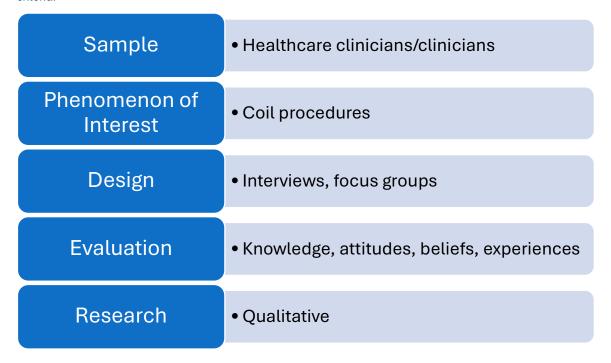
Figure 1- The decision-making process when deciding on an SLR topic, taking into account previous SLRs and what was missing from the existing literature.



2.3.2 Search strategy

The review question was developed using the SPIDER question format, recommended for qualitative or mixed methods studies as shown in Figure 2 (Cooke et al., 2012).

Figure 2- This shows the review question initial development which helped to inform the inclusion/exclusion criteria.



Literature search strategy

The search strategy was developed over several stages using Boolean operators and truncation to improve specificity (Petticrew & Roberts, 2008). The specific terms were adapted due to terms such as 'coil' crossing over with computer and technology fields. A librarian was consulted throughout this process, and databases were discussed and trialled for suitability and relevance in the topic area. The search strategy was adapted several times using a variety of medical subject heading (MeSH) terms (Nightingale, 2009) to maximise sensitivity for the research question. See Table 1 for an example of the search terms used.

2.3.2.1 Databases and grey literature

The databases chosen were relevant to the fields of health and clinical practice as well as gynaecology. CINAHL plus, PubMed, and Scopus were all chosen due to their focus on health research, as well as being cited in over 85% of qualitative reviews as one of the databases used for searches (Dixon-Woods et al., 2006; Stansfield et al., 2014). Further databases such as APA PsycArticles / PsycInfo were searched but yielded no results despite several consultations with expert librarians and supervisors, using a number of amended search terms.

Table 1- The search strategy terms used

interview* OR qualitative OR qualitative AND research OR qualitative AND study

view* OR belief* OR thought* OR perspective* OR presumption* OR attitude* OR experience* OR assumption* OR judgement* OR opinion* OR point of view* OR viewpoint* OR impression*

doctor* OR paediatrician* OR nurse* OR specialist* OR physician* OR clinician* OR obstetric* OR gynaecology OR gynaecology OR gynaecologist OR gynaecologist OR health care professional* OR health professional OR health worker OR health care worker OR medical staff OR "OB-GYN"

coil OR "IUD" OR intrauterine system OR intrauterine device* OR "hormonal coil" OR "copper coil"

Three database searches were conducted on 02.11.2023 and repeated for the final time on 11.02.2024 to check for any additional results within that timeframe. Table 2 shows the results which were found across the 3 main databases used.

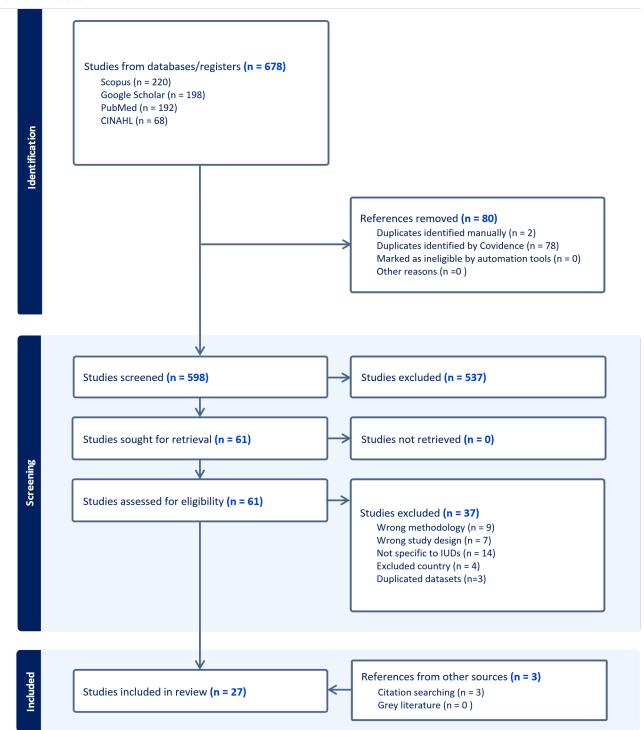
Table 2- The databases used and search results

Database	Results
Scopus	207 results (Search within: all fields, limit placed)
PubMed	190 results (Search within: all fields, no limits placed)
CINAHL Plus	68 results (no subject specific field selected, search modes: boolean phrase and apply equivalent subjects selected, no limits placed)

A decision was made to include grey literature to minimise publication bias (Hopewell et al., 2005; Nightingale, 2009), broaden the search (Mahood et al., 2014) and to reduce the exclusion of potentially relevant research that was conducted as part of audits in healthcare but may be less likely to be published. The inclusion of grey literature in systematic literature reviews is important in adding a diversity of voices and for finding research which may report negative experiences that are of less interest to commercial publications (Paez, 2017). This is relevant for the study in question as it is looking at clinicians' experiences of a type of contraception that is arguably well promoted in various journals and within the medical community.

A search of grey literature was conducted on Google scholar on 02.11.2023 (resulting in 19,900 hits) of which the first 25 pages of results (198 hits) were included. The decision to not use more than one information source for grey literature was due this often including committee and government reports, conference papers and opinion pieces which did not fit our inclusion criteria (see table 2.3.1). Please see the PRISMA Figure 3 for details on papers found and excluded.

Figure 3- The PRISMA diagram (Stovold et al., 2014) which shows the process of search results, screening stages and the final extraction



2.3.3 Strategy for data synthesis

The data were transferred into Covidence (Macdonald et al., 2016), online software used to support the process of undertaking a systematic review. First, duplicates were removed using the software. Next, initial title and abstract screening was completed by SP (doctoral psychologist researcher) and a second reviewer, ShP (another doctoral psychologist researcher). Following this, a full text review was conducted by both researchers.

Both researchers completed their initial and full text screens independently, meeting to discuss any conflicts in decision making. During this time, any papers that were undecided were discussed with research supervisors to ensure strict adherence to the inclusion/exclusion criteria (see table 2.3.1). This provided extra rigour, acting to minimise exclusion of potentially relevant studies and to reduce potential bias (Stoll et al., 2019). The use of a use of a second reviewer was used to maximise reliability and replicability of the search, staying consistent with guidelines for SLRs (Nightingale, 2009).

Tools such as inter-rater reliability scoring were decided against as they fit in with more of a positivist framework (Park et al., 2020) and as such fit less with the critical realist epistemology of this research (Alderson, 2021). Further to this, there have been criticisms of the use of inter-rater reliability. For example, inter-rater reliability has been used in less than 11% of qualitative research and feminist theories argue that using strict reliability measures can reduce multiple perspectives and can imply there may only be one correct way of interpreting data which contradicts the synthesis methodology (Bardzell, 2010; Braun & Clarke, 2006; McDonald et al., 2019; O'Connor & Joffe, 2020).

2.3.4 Inclusion/Exclusion criteria

The inclusion and exclusion criteria were carefully considered, in order to develop a review that would look at the existing gaps in the literature.

The Inclusion criteria were as follows:

- Clinicians from primary, secondary and third sector health organisations
- Healthcare clinicians were defined as any professionals that work within settings where they
 would administer IUDs/coils or be involved in counselling/advising and directly interacting with
 patients. This would normally consist of: gynaecologists, paediatricians, general clinicians,
 obstetricians, nurses, sexual health specialists but may include other similarly qualified
 clinicians. If studies included focus groups or some interviews with managers, they were
 included if there were clinicians also included within the sample
- High income countries (as defined by the world bank (WDI) (Galbraith et al., 2016) (including: USA, Canada, Greenland, Guyana, Chile, Uruguay, Panama, Portugal, Spain, France, Ireland, UK, Italy, Switzerland, Luxembourg, Netherlands, Poland, Austria, Hungary, Lithuania, Estonia, Romania, Latvia, Sweden, Norway, Denmark, Finland, Czech Republic, Saudi Arabia, UAE, Oman, South Korea, Japan, Australia and New Zealand. We decided to limit to these countries as the socio-political and healthcare systems mirror that of the UK more closely and there has been a recent global review into IUD use (Daniele et al., 2017)
- Any age
- Any ethnicity
- Research which refers to clinicians' experiences of different types of the IUD/IUS
- Clinicians' perceptions of IUDs/coils
- · Clinicians' understanding and knowledge of IUDs and reasoning for use
- Clinicians' experiences of the procedure and post procedure
- Clinicians' experiences or beliefs around acceptability/continuation rate
- Clinicians' counselling/decision making around use of the coil/IUD
- Research studies were included if their focus was on LARCs more generally as long as they included data on IUDs
- Qualitative or mixed methods: questionnaires, surveys, self-reports, evaluation: views, experiences, beliefs.
- Time period within last 30 years, since the inception of IUDs.

The exclusion criteria were as follows:

- Solely quantitative methods or analysis
- Studies which do not refer to the experiences or perspectives of healthcare clinicians relating to IUDs or IUD procedures – e.g. papers related solely to policy, funding or initiatives around IUDs/LARCs or contraceptive effectiveness of IUDs
- Clinicians not based in the high-income countries (as listed above) with comparable healthcare systems to the UK
- Populations that only include funders or managers and therefore do not refer to direct experiences or perspectives of IUD use or procedures
- · Papers which discuss LARCs but do not make specific reference to IUDs
- Opinion pieces, articles authored by professional bodies providing practice recommendations, other systematic literature reviews

2.3.5 Search strategy results

An initial 678 papers were identified for inclusion and 80 duplicates were removed, meaning 598 remained for screening (please see Figure 2.4.1 for details). After all the papers were screened, further supplementary methods were used to identify additional papers (Stansfield et al., 2014). Specifically, the reference lists of the included papers were searched for any additional papers to add to the rigour of our search and to minimise exclusion. This added a further 3 papers to the 24 already found. Advice was solicited from supervisors who were subject matter experts, to identify any further papers, however this yielded no results as these papers were already identified in our search (Horsley et al., 2011). This was the final part of the search before extraction which was conducted on 11.02.2024.

2.3.6 Extracted studies summary

The publication dates of included studies ranged from 2009-2023. The majority of studies were conducted in the USA (17), followed by Australia (5), Sweden (2), Canada (1), New Zealand (1) and the UK (1). Participants were mostly different types of medical doctors but also included nurses, midwives, health educators and advocates, and service managers. Complete demographic information about participants was poorly reported, but where present, it indicated a tendency for more female participants and people from white ethnicities. Sample sizes ranged from 8-51, with a mean of 20 participants overall. Most studies were conducted in primary care settings, but there were also a small number of outpatient settings and specialist sexual health clinics. Data collection was largely via semi-structured interviews with some using focus groups. Methods used were thematic analysis (13), content analysis (1), mixed methods (2), a-priori (2), grounded theory (3), phenomenological approaches (2), implementation science theoretical framework (1) and critical discursive analysis (1) unclear (2). See Table 4 for details of the extracted studies.

Table 3- Data extraction table

WOMEN'S NEGATIVE EXPERIENCES OF IUD PROCEDURES

Title	Year & country	Authors	Aims/ objectives	Design/ methods	Participant characteristics	Results/ outcome	Strengths and limitations	Clinical and practical implications
Taking the clinician "our of the loop:" patients' and physicians' perspectives es about IUD self-removal		Jennifer R.Amico, Ariana H. Bennett , Alison Karasz, Marji Gold	To explore feelings about IUD self-removal from the perspective s of physicians (and IUD users)	Sample size: t12 Setting: primary care Design: semi structured interviews conducted in person with physicians Methods: inductive and deductive content and thematic analysis	Gender: female (75%) male (25%), no ethnicity recorded. Professions included: all registered physicians	-No routine counselling about self-removal - Valuing patients' autonomy in contraceptive care and self removal -Concern about self removal and concern about partner coercion	Strengths: + Researchers came from +both academic and clinical backgrounds + Clinicians were well distributed across seniority and experience levels which could allow for a variety of experiences and opinions, with the majority working mostly in women's reproductive health + Participants were compensated for taking part by being given vouchers Limitations: - Interviews with clinicians were conducted in person and interviews with patients were conducted by telephone - Bias potential in clinician interviewing - Only one researcher recruited/interviewed physicians whereas both researchers recruited interviewed patients so possibility for bias in recruitment and for interview style.	

							- Using a clinician for interviews may have influenced how some participants responded - No ethnicity recorded for authors or participants - No conflicts of interest stated	
"I wish they could hold on a little longer": physicians experience s with requests for early IUD removal	2017, USA	Jennifer R. Amico, Ariana H. Bennett, Alison Karasz, Marji Gold	To examine family physicians' perspective s on early IUD removal	Sample size: 12 Setting: primary care Design – qualitative, semi structured interviews Methods - thematic analysis	Characteristics Gender: female (75%) male (25%), no ethnicity reported. Professionals included: family medicine and resident physicians.	Results: -Positive attitudes toward the IUD - Patients' reasons for removal focused on symptoms that were not well tolerated -Clinicians responses to removal and particularly early removal often met with reluctance and desire for continuation - Weighing autonomy and reproductive goals	Strengths: + Good range of physicians across all stages of career, with most working predominantly in women's reproductive health and with good experience of insertions + Conflicts of interest disclosed Limitations: - Study setting in New York may be less transferrable to other settings due to ease of contraception access - Participants knew the interviewers which may have affected the results - No ethnicity records for participants or authors - Exclusion of nurses and gynaecologists	-Suggestions of miscommunication between clinicians and patients - Showed some evidence that physicians can bring biases to the IUD removal discussions which can affect access to IUD removal and impact on reproductive autonomy

Paediatricians Attitudes and **Beliefs about Long-Acting** Reversible Contraceptives Influence Counselling

Elise D. Berlan. Nicole M. Pritt and Alison H. Norris

2016.

USA

To assess LARCrelated knowledge and beliefs in paediatricians and how this can influence counselling practice

Sample size: 23 Setting: Community practice Design: Mixed methods. Qualitative part used semistructured

interviews.

Methods:

methods.

a-priori

Characteristics: Gender: 74% female, 26% male. No ethnicity recorded

Result: -Attitudes and beliefs about IUDs that express uncertainty, paucities of knowledge and unfavourable attitudes towards their use in adolescents. Some participants expressed the opposite view after gaining more understanding in the topic. - Routine counselling in **IUDs** was influenced by confidence in knowledge. respect for patient autonomy, perception that adolescents would not want it and concerns about side effects.

Strenaths:

- + Method appropriate for gaining rich understanding of participants views in an underrepresented age group within this topic
- + Interviews were conducted by a research assistant with no previous experience at the institution, which was stated to minimise social desirability bias
- + Conflict of interest stated Limitations:
- No ethnicity recorded for authors or participants -Participants only recruited from one site so generalisability may be constrained

- Fasier onsite access to IUDs would improve access and counselling - Improvements in
- knowledge and administration of IUDs could influence paediatricians counselling and improve choice for adolescents

WOMEN'S NEGATIVE EXPERIENCES OF IUD PROCEDURES

"Birth Control can Easily Take a Back Seat": Challenge s Providing IUDs in Community Health Care Settings	2018, USA	M. Antonia Biggs, Shelly Kaller, Cynthia C. Harper, Lori Freedman , Aisha R. Mays	To assess community health centers' (CHCs) capacity to offer streamlined intrauterine devices (IUDs) services	Sample size: 20 Setting: Community healthcare centre Design: Mixed methods survey and semi structured telephone interviews Methods: qualitative data were developed through codebooks.	Characteristics: Gender: female (80%) male (10%) transgender (10%) Race: white (55%), black/African American (25%), Latino/a (5%), Asian/Pacific islander (5%), mixed race/other (10%)	health needs are deemed to be of higher priority -Pressures to serve a high volume of patients - Time related challenges of 15-	Limitations -Qualitative data analysis method was not clear, appeared to be based on	- Training on IUDs required for all clinicians and staff - A need for protocols on IUD placement - Proposals for giving several stage appointments for IUD prep, counselling and procedures - Potential for support staff to conduct contraceptive screening and some counselling and knowledge guidance to assist with procedure set-up
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The Fine Line Between Informing and Coercing: Community Health Center Clinicians' Approaches to Counseling Young People About IUDs	2020, M. USA Antonia Biggs, Lucia Tome, Aisha Mays, Shelly Kaller, Cynthia C. Harper and Lori Freedman	To explore IUD practice for young people in community health centres, considering history of coercion and aims for empowering young people	Sample size: 20 Setting: Community healthcare centre Design: qualitative, semi structured interviews Method: grounded theory	Characteristics: Gender: female (16), male (4). Professions included: nurse clinicians, physicians (paediatrician, family medicine doctor, internal medicine specialist) and a physicians assistant. Ethnicity was not stated.	Results: - Overlapping approaches to informing patients about contraceptivesParticipants described informing patients of all options as well as presenting information in accordance with their preferences Counselling as a means of empowering patients. Participants described how histories of coercive practice influence how they approach their work and building trust, moving away from past reproductive injustice - Tension between patient and clinician preferencesParticipants described difficulties of holding autonomy while not wishing to stigmatise methods that were highly effective - Counselling against 'early' IUD removal. Participants described feeling like their patients were asking for removal	Strengths: +Particularly strong efforts were made to protect participants identity + Data collection and analysis appeared to be completed in a thoughtful way with interviewers meeting regularly to reflect and suggest revisions to the interview guide and discuss themes + Participants were given a \$50 gift card for participating Limitations: -Participants took part in an IUD training prior to the interviews which may have primed their interest during or arguably may have been there already as they agreed to take part in the training - While interviewers' races were disclosed, they did not reflect on how this may have shaped their data collection or analysis	-A need for more clinicians who can fit IUDs and other barriers such as finances which can affect availability for and counselling of IUDs -Clinicians' practice could at times be coercive which could lead to patients have worse outcomes and be less likely to continue with their LARC or use it in the future -This study supports previous research that suggests informing patients of expected side effects in advance can make them more likely to continue with the IUD rather than dismissing patient concerns

prematurely due to side effects they felt would reduce eventually with time. -Participants' accounts may have been subject to social desirability bias potentially leading to more favourable opinions about the IUD - No conflicts of interest were declared

Perspectives 2022, of USA obstetricians and midwives on the provision of immediate postpartum intrauterine e devices: A qualitative service

evaluation

Nicola To explore Boydell, the views of Michelle obstetrician Cooper, s and Sharon T midwives Cameron. on Professor providina Anna postpartum Glasier. intrauterine Dr Shiona devices (PPIUD) Coutts. Mrs within maternity Frances McGuire. settings Jeni Harden

Sample: 30 Setting: Maternity

Design group and individual interviews conducted in person and on the telephone

Methods thematic analysis Characteristics:

Professions included: obstetricians and midwives No gender or ethnicity data were disclosed.

Results:- PPIUD described as effective and helping to remove barriers to contraception uptake and pain in postbirth insertion. Public health benefits such as reducing abortion rates and missed postnatal appointments - Benefits of inserting PPIUD was seen as expanding nurses development and helping them deliver holistic care throughout women's pregnancy journeys. However

- PPIUD training was not appropriate for all and created extra workload. Further concerns about pain during insertion and complications.
- A need for consistent post insertion

Strengths

- + Researchers described a reflective approach to the analysis, meeting regularly to compare recurrent themes and discuss how their nonclinical status may influence interviews and analysis
- + PPI involvement was sought and provided support in study development Limitations
- -Type of thematic analysis used isn't clear as themes seem to be summaries of the data, despite Braun and Clarke citation
- -Difficult to analyse datasets that include both group and individual interviews
- Difference in quality in interviews conducted in person vs via telephone

- Information and post insertion support was described as being required to minimise expulsion rates
- Increased funding was required to continue to provide PPUID

staff

- No mention of conflict of

interest or compensation of

information and support

was expressed to

minimise risk of IUD

					expulsion.	-No participant or author demographics	
"It's a very nuanced discussion with every woman": Health care clinicians' communic ation practices during contracept ive counseling for patients with substance use disorders	Elizabeth Charron, Rachel M. Mayo, Smith F. Heavner- Sullivan, Kacey Y. Eichelber ger, Lori Dickes, Khoa D. Truong, Lior Rennert	To establish healthcare professiona Is practice within contracepti ve counselling for women who use substances	Sample: 24 Setting: Specialist family planning clinic Design - qualitative, semi structured interviews with clinicians Methods - thematic analysis	Characteristics: Gender: 92% female, 8% male Race: 100% white Professions included: medical doctors and advance practice nurses	Results: - Developing interpersonal relationships and trust as an integral part of building relationships with patients with stigma and negative previous experiences of health systems - Exchanging information and communication around contraception should be tailored to the individual and clinicians discuss the sensitive ways they approach this so it doesn't come across as judgemental or lecturing - Autonomy in contraceptive decision making and directive counselling. Clinicians	Strengths + No conflicts of interest were declared + Useful reflections about the history of coercion and the results, showed clinicians struggling to balance patient autonomy and their beliefs Limitations -Participants were not provided with compensation for taking part -It may have been helpful to state the author's position in this paper as it involves a particularly vulnerable populationThere were inconsistent terms being used as substance use disorder (SUDs) was the most prevalent, some other terms such as substance-using patients can read as slightly	- For clinicians to continue to be critical and reflective of how they position certain LARCs such as the IUD and how this is presented to the patient population - Clinicians have a duty to respect the autonomy and right to choice of medical treatment and particularly so for vulnerable groups like this patient population. For clinicians to be aware of how clinician -Directed counselling can add to continued distrust in healthcare and damaging trust in the community

describe wishing to provide women with autonomy while using their own clinical judgment to assess which methods might be most compatible with their lifestyle derogatory and devoid of the important context that was mentioned elsewhere. It would have been helpful to mention preferred terms in consultation with the patient population

- Clinicians who were motivated to discuss their care for this population may have been over-represented leading to an unrepresentative sample or less of an accurate picture of counselling practice - There was a lack of cultural/ethnic diversity in the clinicians included

Clinician 2020,U
Practices and SA
Young
Women's
Experiences
with Clinician
Selfdisclosure
during
Emergency
Contraceptive
Visits

Morgan Cheeks, Shelly Kaller, Aisha Mays, Antonia Biggs To explore clinician perspective s on self disclosure of contraceptive experience s and its effect on contraceptive decision making

Sample: 18
Setting:
Community
health
centre
Design:
qualitative,
telephone
interviews
Method:
deductive
and
dedoose,
thematic
methods

Characteristics:
Gender: female
(14), male (2),
transgender Race:
white (9),
Black/African
American (1),
Asian/Pacific
islander (4),
Latina/o (1), mixed
race/other/unknown
wn (3) Professions:
physician (3), nurse
clinician
(15)

Results:

- The majority of clinicians reported little to no disclosure during contraceptive counselling. For the few that did, they reported either comfort with disclosing or a difficulty in disclosing. Perceived advantages and disadvantages - clinicians considered how disclosure could impact on their relationship

Strengths:

- + Diverse gender range + Clinicians were reimbursed for their participation Limitations:
- -No conflicts of interest were stated
- -Researcher demographics or positionality were not stated -Any sampling bias which may have occurred using convenience sampling was explored
- -While clinicians were reimbursed, they were given different amounts to patients

- Clinicians should assess the benefits of providing PSD especially for young people in a CHC setting -Clinicians should consider patient autonomy and work to preserve the patient clinician relationship both when considering selfdisclosure and in general School 2014. Katie To explore Sample: 8 Characteristics: Gender: 1 man, 7 Settina: based USA Davis school School healthcare women. No based clinicians healthcare ethnicity reported. clinicians experience setting **Professions** experience included: s. attitudes s of midwives, nurse and beliefs counselling Design: semiabout clinicians, health adolescent structured intrauterin educators and s and to interviews with develop paediatricians. school-based contracept intervention healthcare ion s to increase clinicians **IUC** Methods: contracepti arounded theory counselling

Results: -Barriers to IUD counselling -Age, lack of interest and concerns around perceptions of vulnerability to sexually transmitted diseases due, family, perception of pain or risk to patient. -Facilitators to IUD counselling - Patient interest, clinician knowledge, patients that have experienced failure or are unable to use other methods, family dynamics, clinician motivation, having a health educator or inserter on site. -Perception of teen pregnancies being a problem among patients served due to contraception use varying in consistency

Strenaths: + Detailed thematic analysis with quantity of themes shared across interviews + Method appropriate for sample size + Use of reliability measures during coding + Relevant choice of conceptual model that has been used in IUC provision Limitations: -Lack of critique for IUC being targeted at low-income young women -Focus of discussion seemed to focus solely on use of IUC as a measure to control teenage pregnancy rates -There was a lack of in depth understanding of the barriers to IUD for parents/caregivers as this was described to be

overcome using various

-Selection and social

advertisements of the IUD

desirability bias described
- Lack of demographics
For participants/interviewers

-Study discussed the benefits having of health educators/inserters on site where increased training and support from within the community could be addressed -Clinician knowledge to be extended to all as it was

seen to be a facilitator

Healthcare 2020 clinicians' Australia perception s of the challenges and opportunities to engage Chinese migrant women in contraceptive counsellina: a qualitative interview study

Hankiz Li, Deborah Bateson. Rachel Thompson care to , Chun Wah Michael Tam. Carissa Bonner and Lyndal Trevena

To explore Dolan. Mu health care professions experience s of providing contraceptive Chinese migrant women

Sample: 20

Primary care

Settina:

Design:

semi

qualitative,

structured

interviews

Method:

Thematic

analysis

Characteristics: Gender: female (20), male (2) Professions: general clinicians, SRH doctors and nurses, and one gynaecologist. Ethnicity was not disclosed, just that 7 participants spoke both English and Chinese

Results: Themes:

- 'Are you using contraception?': the case for being proactive and opportunistic
- Counselling advice was often provided in an opportunistic way -'Getting the message
- across': communication compounded by barriers
- 'Hormones are unnatural?': women favouring non-hormonal methods
- Fears of hormonal effect on menstruation and worries about side effects
- -'Word of mouth': social influence on methods
- -Family were described to either not discuss methods or may advise them against hormonal ones, alongside potential partner and peer influence

Strengths:

- + Participants recruited were representative of the patient population being studied Limitations:
- There was an inconsistency with which participants were provided with reimbursement -Findings may not be representative in other geographical locations
- Some of the participants recruited only interacted with a small sample of the population of interest
- Lack of ethnicity data disclosed for participants or authors

- -Community level approaches are needed to improve cultural competency in care provision -Helping to provide
- specialist knowledge to the community would help enable more informed choices for patients

Inclusion of intrauterine device insertion to registered nurses' scope of clinical practice	2019, Australia	Kirsten Fleming, Yan Cheng, Jessica Botfield, Mariana Sousa, Deborah Bateson	To explore nurses and medics attitudes to extending nurses scope of practice to include IUD insertion	Sample: 20 Setting: Family planning clinic Design: qualitative, semi structured interviews Methods: Thematic analysis	Methods: Professions included: nurses and medical officers. No other demographics information was given.	Results: Perceived benefits and value of IUD training and expanded practice for RNs - An increase in IUD insertion appointment availability and a positive regard for the skills acquired Perceived barriers and challenges - Concerns about potential for adverse reactions or complications and the additional responsibility this entails for them and the risks for their client Factors contributing to successful implementation of IUD training and expanded practice for RNs - A need for strong working relationships between nurses and doctors as well as support from non-clinical staff and mentors	feedback before and after training to compare differences Limitations: -Some descriptive data in	-Evidence suggests nurses who are properly trained are able to deliver the same standard of care as medics - Both nurses and medics believe expanding nurse's responsibilities to include IUD insertion as a positive step -More professionals trained in IUD devices can increase the scope of access and counselling in IUDs for women
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Understanding 2015. the low uptake Australia of long acting reversible contracept ion by young women in Australia: a qualitative study

Camervn Garrett. Louise A. Keogh, Anne Kavanagh. Jane Tomnav. and Jane Hocking

To explore the barriers to LARC use in a population of young women in Australia and to identify approaches for increasing knowledge

and access

Sample: 15 Settina: Primary care

Design: qualitative. semi structured interviews Methods: thematic analysis

Characteristics: **Professions** included: general clinicians, nurses. medical directors. sexual health educator and health advocates Gender: Female (14) Male (1). No ethnicity data was collected.

Results:

support

- Low uptake affected competency in insertions

Norms - IUDs were described as being outside of the norm for women and for clinicians to suggest as they were seen as more common with older women. Bodily consequences -Professionals felt the need for -No ethnicity information vaginal examination was a barrier for many women. Misconceptions - A lack of knowledge or awareness of IUD methods can prevent professionals like GPs from giving it to young people and thev believed this is comparable to voung women's understanding of methods LARC access issues. -Professionals cited long waiting times and high upfront costs as barriers, giving examples of it being common place to wait months for an IUD insertion. -Limited confidence and

- Strengths: + A diverse range of professionals were recruited to increase diversity and a range of perspectives Limitations: -No conflicts of interest were stated was collected for participants or authors -Clinician participants were not compensated for their participation while patient participants were -Use of data saturation may have meant further themes could have been missed -Staff targeted for recruitment had an interest in the topic so may be subject to bias, may be more likely to favour IUDs and may be less representative of the general professional population's beliefs
- Potential to increase knowledge about IUDs and LARCs in earlier schooling - Training for healthcare
- clinicians about the importance of discussing a range of contraceptive options

Clinician based UK barriers to provision of intrauterine contraception in general practice

2018.

Lesley Hoggart, Susan Walker, Victoria Louise Newton. Mike

Parker

To examine barriers to **IUC** uptake in UK general practice

Sample: 14 Settina: General practice

Design: mixed methods. surveys and interviews Methods: thematic analysis

Characteristics: Professions:

General clinicians (7) and nurses (7). Demographic information was provided for the whole study but it is not clear how it applies to those that took part in the qualitative interviews.

Results:

Proactive selection of women for whom IUC is considered suitable -Most clinicians recommended IUC for more women than were currently using it, including young women Risk aversion -Perceptions of risk based on nulliparous women were higher and some nurses deemed IUC to be more risky to insert compared to other invasive contraception such as the implant Perceived and received knowledge of 'what women want' -Clinicians stressed that contraception choices were always patient led. - Clinicians were often waiting a long time to receive the training as

well as issues with revalidation if they aren't using these skills on a

regular basis

Strenaths:

+ They used an advisory group and piloted part of the methods

Limitations:

-Sampling technique was non-random due to time constraints and budgets. those selected may have been subject to selection bias as they may have been more likely to be supportive of IUC by choosing to opt-in

- Practices (but not clinicians) were renumerated for taking part in the study

sample and not for authors

- Findings may not be generalisable -Ethnicity data was not provided in the overall

-Additional training for GPs on the IUC would be helpful in providing women with knowledge and better ability to make an informed decision

-For all clinicians to be given evidence based information on all contraception to help fill the knowledge gap and support IUC provision where appropriate

Long acting
Reversible
Contraception
for
Adolescents
and
Young
Adults:
Patient and
Clinician
Perspectives

2013.

USA

Megan L. Kavanaug h. Dr.P.H.. Lori Frohwirth. B.A.a. Jenna Jerman. M.P.H.a. Ronna Popkin, M.S.b, and Kathleen Ethier. Ph.D.

L. To explore clinician perspective s on LARCs for teens and young adults

Sample: 20 Setting: Community and inpatient family planning clinics

Design: semistructured interviews and focus groups with staff Methods: type of analysis unclear, phenomenological approaches assumed

Characteristics: Professions: administrative directors, clinicians, educators, medical assistants and

receptionists.
Other
demographics
information was
not provided.

Results:

Attitudes about candidacy for IUDs and implants - Teens, nonmonogamous women and women who have never given birth were traditionally seen as ineligible for IUDs by staff Pros and cons of IUDs and implants -Directors and other clinicians expressed more concern about IUD use compared to implant use in younger women Identifying and addressing challenges to providing LARCs to young women - Cost related challenges due to perceiving young women as being more likely to 'give up' and have methods removed prematurely. incorporating revised quidelines into clinic policy and improving clinician buy-in to address staff resistance Strengths:

- + Conflict of interests disclosed
- + Use of both quantitative and reflexive reliability measures
- + Conflicts of interest disclosed
- + Public sites were chosen due to providing care to the most vulnerable women

Limitations:

- -No demographics data were provided for clinician or participants
- -While compensation was given, there was no clear rationale for why directors interviewed were given more compensation than the other clinicians interviewed
- Type of qualitative analysis was not clearly stated

- -Recommendations for staff to use open counselling styles that are centred around the client's wishes rather than what is assumed as being more or less desirable by the clinician
- A need to place emphasis on respecting clients beliefs and desires in future training

Doctors' experience of the contraceptive consultation: a qualitative study in **Australia**

2017. Australi

Marguerite Kellv. Kumiyo Inoue. Kirsten Black. Alexandra Barratt. Deborah Bateson. Alison

Rutherford.

Marv

Juliet

Stewart,

Richters

To explore doctor's perceptions of how their knowledge and attitudes towards different contraceptives and sexuality influenced contraceptive counselling and management

Sample: 15 Settina: Community and inpatient services

Design: qualitative. semi structured interviews Methods: thematic analysis

Characteristics: Professions:

medical doctors working in family planning. sexual health. specialist reproductive health, general practice. university clinic and youth services. No other demographics information

was provided.

Results:

illness - difference of working in women's health compared to other fields where patients are more unwell Doctors'

preferences for contraceptive methods -Many doctors described a preference for the IUD and saw the patient doctor relationship as a market with clients as the customers Contraceptive counselling: the process of excluding methods - A range of techniques were described as being employed to choose the right method including using the evidence base, clinical

opinion and intuitive approaches based on

client's needs Sexuality and the contraception consultation:

clinicians reported these were treated as separate within medical practice, despite links around women's libido and the female sexual

response

Approach to managing a condition that is not

were compensated for their participation + A conflict of interests statement was aiven

Strenaths:

+Participants

Limitations: -A lack of demographic information was provided for participants or authors -Doctors who deemed 'experts' were sampled and may have less representative views than others

-A consideration for education around sexuality within contraception should be incorporated better into medicine training and those for working in women's

health

Contraceptive counselling of women seeking abortion - a qualitative interview study of health professionals' experiences

2017. Sweden

Salomons son. B.. Thor. J... Brynhildsen, J., Alehagen,

Kilander.

H.,

To explore health professionals hospital experiences of providing contraceptive qualitative,

women who

an abortion

have had

care to

Design: interviews Methods: content analysis

Settina:

Sample: 21 Characteristics:

Gender: female (19) male (2). Professionals: gynaecologists, midwives. No ethnicity data was included.

Results:

Complex counselling -Difficulty of discussing contraception at a time of an abortion when patients may be particularly vulnerable and emotionally exposed Elements of counselling -Clinicians described this to consist of information giving. guiding in the choice of contraception and previous history of unwanted pregnancies as well as age Finding a method - Challenges in women finding a method in the context of abortion and limitations in HPs knowledge and limited access to effective contraception

Strengths:

- + No conflicts of interest stated
- + Participants interviewed had experience of counselling a range of women from different socioeconomic contexts

Limitations:

- -Participants did not appear to be compensated for their time
- -There were a lack of midwives recruited in comparison to gynaecologists as contraception during abortion is performed by both professionals
- -No ethnicity data was included for participants or authors

-A need to develop healthcare professionals skills in providing sensitive contraceptive care within the difficult context of abortion

-A need to evaluate and provide feedback on the effects of contraceptive counselling at the time of abortion

GPs' perspectives on prescribing intrauterine contraceptive devices

2017. Australi

Gabrielle Lodge, Lena Sanci. Meredith Temple-Smith

To investigate barriers GPs face in the prescription of IUDs

Sample: 17 Settina: General practice

Design: qualitative. interviews Methodology: thematic analysis

Characteristics: Gender: female (12), male (5) No ethnicity data was provided.

Results: Misconceptions brought to the consultation - Patients were described to either have a lack of knowledge or incorrect misconceptions of IUDs Lack of GPs currently performing insertions -GPs described having a lack of training n IUDs as well as reservations around insertion Issues involved in the referral of patients for insertion - Other contraceptives were deemed to be easier to prescribe rather than the lengthy referral processes for

IUD insertion

Strenaths:

+ Conflict of interest statement given + Efforts were made to improve gender mix and a diversity in terms of geographical area in which GPs were situated

Limitations:

- Social desirability bias risk as participants knew that the interviewer had an interest in increasing IUC uptake - No ethnicity data was provided for clinicians or participants

- A need for the reduction of barriers for GPs accessing IUD training as well as costeffectiveness for both the clinician and patient - Increasing patient access to GPs who currently perform insertions can help to reduce costs and waiting times for patients and help keep GPs skills in insertion

The limitations 2022. USA of patientcentered care:

Manzer. Jamie L: Bell. Ann

To explore processes around the early

Sample: 51 Settina: Private and patient X

Characteristics: Ethnicity: white (74%), African American or black (18%),

Results: Withholding selfremoval information -Patients are strategically in the study not counselled on IUD

Strengths:

- + Participants were compensated for taking part
- Clinicians are required to have on-going professional development in areas like patient-centered care and

The case of early long acting reversible contracept ion (LARC) removal

removal of long acting reversible

contraceptive Design: (LARC)

qualitative. semi structured interviews Methods: thematic analysis

Indian/Asian (6%) programme services and Hispanic

(2%). Professions: physicians, nurse clinicians and midwives. Gender data was not provided.

self-removal for the purpose of discouraging it Negotiating with patients - Nearly all

clinicians described asking their patients to extend their LARC use regardless of the presenting concern,

treating side effects and thereby setting a delayed timeline for removal.

> Setting removal criteria -Clinicians described certain criteria are met and a focus on

prioritising keeping the IUD due to its effectiveness at reducing pregnancy. Stalling by creating inconvenience -

exploiting patient trust to delay or reject requests for early IUD removal by ordering a series of tests that appear to centre around the

patients concerns.

+ Competing interests were declared

Limitations:

- Clinicians recently took part in a training programme concerned with LARC provision and reducing pregnancies which may have influenced their attitudes

- No demographics data about the interviewers or authors was shared

- While there was a removal LARC only after statement that it was not within the scope of this paper, it may have been useful for the interview guide to look into racial or ethnic questioning particularly as this is a pertinent issue as explained in the background

how this patients preferences should guide care and not be undermined

Interdepen dent Barriers to **Providing** Adolescen ts with LongActing Reversible Contracept ion: Qualitative Insights from clinicians

2016.

USA

Molly K. Murphy. Cindy Stoffel. Meghan Nolan and Sadia Haider.

To identify barriers for healthcare professionals school providing adolescent s with LARC

Sample: 16 Settina: Community and settings

Design: qualitative, semistructured interviews Methods: Modified grounded theory approach/content analysis using codebooks

Characteristics: Gender and ethnicity data were not collected. Professions: paediatricians. family medicine physicians and

advance practice nurses.

Results:

Clinician confidence in LARC - participants described perceiving adolescents to be disinterested in LARC as well as struggling with their own sense of confidence in their abilities to address fears or misconceptions Patient-centered counseling - clinicians appeared to juggle several things such as confronting myths about LARCs, identifying individual concerns patients may have and highlighting the positive attributes of LARCs in comparison with other methods. Support for LARC insertion - participants described the need for training on insertion as well as having available devices, mentorship and support when practising these skills

Strenaths:

+ Participants were compensated for their time + Conflicts of interest were reported

Limitations:

- There was a lack of reflection about the use of an provide it as a further inter-rater reliability code. measuring 'almost perfect' levels of reliability between coders
- -There was a lack of demographics information shared for participants and authors
- -Difficulties in generalising the study findings to other populations
- -Participants response may have been subject to social desirability bias, for example they may have declined to share viewpoints that they perceived would be viewed negatively

-A need to increase instrumental support for LARC for clinicians and services -An increase in clinician

training on LARC to help clinicians feel more comfortable and to option for interested patients

Providing
family
planning
and
reproducti
ve
healthcare
to
Canadian
immigrant
s:
perception
s of
healthcare
clinicians

K Bruce and Jacquelin e Willinsky

2009.

Canada

the
experience
s of
providing
reproductive
healthcare
to
immigrants
in areas in
Canada

To evaluate

Sample: 9 Setting: Family planning

Design: qualitative, interviews Methods: Grounded theory Characteristics:
Professions:
sexual health
counselor, family
physicians, public
health nurses,
nurse clinician and
professor. No
ethnicity data was
given but 2
participants were
described as
immigrants.

Results:

Language barriers to family planning and reproductive health - language among other barriers such as transportation, accessibility and difficulty in finding a female physician were cited as common difficulties.

The role of gender in family planning decisions - observed

differences in power dynamics and decision making around contraception in different cultures. Cultural sensitivity - a need to consider factors around contraception such as IUDs that can cause symptoms that can clash with people's religious practice or ways of living.

Strengths:

- + Authors made efforts to provide rigour in the analysis procedures
- + Some references to some of the authors being immigrants was mentioned

Limitations: -

- This may only capture the views of clinicians who have had patients who are a small sample of the immigrant population and those who have accessed services -No conflicts of interest were stated
- -Limited demographics information was provided on interviewers and participants, there was no data pertaining to gender or ethnicity for example

-To address barriers to access care and services for immigrants -For clinicians to access training in cultural sensitivity in providing gendered and culturally appropriate care

2018. Can **Paediatricians USA Provide Long Acting** Reversible Contracept ion?

Alison Norris. Nicole Pritt. Elise D. Berlan.

To understand Sample: Provision of LARCs and identify barriers and opportunities for its provision in paediatricians n community practice

23 Setting: Community care Design: qualitative, semi-

structured

interviews

Methods: a

prior open

coding

Characteristics: Gender: female (17)male (6) Professions:

Paediatricians

Results:

- -Clinicians cited a lack of reproductive health experience and in terms of specifics like pelvic exams that can be required in IUDs - Lack of IUD fittings makes clinicians feel less skilled and less likely to be motivated to offer them
- Primary care was not seen as an appropriate setting for IUDs, some settings didn't have basic equipment like tables with stirrups
- Patients were described as not being accustomed to LARC methods

Strengths:

+ Conflicts of interests stated

Limitations:

- -No demographics information patients about the clinicians or authors - A need to consider which was provided
- -There may have been less generalisability using this method compared to a quantitative approach as well as being specific to one area paediatricians worked
- Some reflection on a clinical trainer's role in the study may have been beneficial to consider additional bias

- -Providing interested clinicians with training to help increase their confidence and access for
- clinical environments can be set up for IUD use and what equipment is needed for clinicians to be able to provide the service

New York Citv Physicians' Views of **Providing** LongActing Reversible Contracept ion to Adolescen ts

2013.

USA

Rubin. Katie Davis and Diane McKee

Susan E.

To explore primary care physicians' experience s. attitudes. and beliefs about counselling and

provision of

adolescent s

LARC to

Sample: 28 Settina: Primary care

Design: qualitative, in-depth telephone interviews Methods: used an implementa tion science theoretical framework

Characteristics: Gender: 74% female 26% male Professions: family physicians, paediatricians and obstetricians gynaecologists. No ethnicity data were collected.

Results:

Capability - physicians were not aware of adolescents being suitable IUD candidates and were not trained to offer to this cohort Opportunity - the culture of the clinic and which contraceptives they typically offer can vary, with paediatricians offering the most limited options Motivation - this described clinicians grappling with a series of competing concerns such as considering STI's, pregnancy prevention and concerns using IUDs could lead to reduced condom use.

Strengths:

- + Steps were taken to address reliability
- + Conflicts of interest were stated
- + Interview guide was developed with rigour

Limitations:

- -No ethnicity data were collected on participants or authors
- -Social desirability bias may have occurred as the interviewees knew the interview's research interests -All interviews were
- conducted via the telephone Rather than face to face which may have impacted quality

- Training to be considered for paediatricians and other physicians on the suitability of IUD use in adolescents - A need for removing
- access and financial barriers for IUD use

Claims in the clinic: A Sweden qualitative group interview study on healthcare communication about unestablished side effects of the copper IUD

Maria Wemrell and Lena Gunnarsson To explore experience s of healthcare clinicians in regards to navigating conversations with patients concerning contesting medical knowledge or claims about the IUD

Sample: 15 Setting: Family planning clinics

Design: qualitative, semi structured digital group interviews Methods: thematic analysis Characteristics:
Gender: women
(100%)
Professions
included:
midwives and
gynaecologists.
Ethnicity: No
ethnicity
demographics

were reported.

Results: Principles of evidence

based medicine (EBM) - Clinicians expressed feeling a sense of trust in their professional qualifications and a need to following clinical guidelines and believed that these had a firm evidence base which disproved the claims patients may have made or heard Principles of personcentred care (PCC) -Clinicians explained a sense of obligation to listen to and respect the patient, aiming to reach a level of mutual understanding EBM vs. PCC? -Difficulty in navigating a dualism in following auidelines on best

practice as well as respecting patients and their perspectives Strengths:

- + Authors declared no conflicts of interest + Authors clearly stated their epistemology and engaged in reflexive approaches considering their own biases and knowledge claims
- Research to critically assess and the safety of the IUD to provide more robust evidence-based practice for clinicians

- Limitations:
- Some of the results may not be generalisable as the healthcare clinicians recruited may have been more interested in the topic of systemic side effects than others in their profession
- No ethnicity data was gathered for participants or considered from the authors

Reconciling EMB and PCC - Clinicians explained a need for more research on the copper IUD to help support knowledge and so they can be clear and test some of the perceived myths. supporting their right to auestion things

Experiences of Advanced Clinicians with Inserting the Copper Intrauterine Device as **Emergency** Contraception Rachel L. Wriaht. Caren J. Frost. David K. Turok

2016.

USA

To assess the perspective s of advanced practice clinicians using the copper IUD as emergency

(EC)

Sample: 12 Settina: Family planning clinic

Design: qualitative, semi structured interviews contraception Methods: A phenomenological approach was used for the study and analysis

Characteristics: Professions: nurse clinician / midwives and physician assistants. Gender: female

(100%). Ethnicity: Caucasian (100%).

Results:

Personal views toward the copper IUD as EC -The use of the IUD as EC was guided by a sense of responsibility to protect patients from unwanted pregnancy. Perceived patient views of the copper IUD as EC hypothesis that knowing someone who had an IUD to recommend it to patients would make them be deemed more favourable. Process of presenting the copper IUD as a method of EC to patients - Impacts of

clinic structure and frequency of seeing Strenaths:

+ No conflicts of interest were stated

Limitations:

-The author conducting all interviews is not a clinician and participants may have been influenced by this -Homogenous sample of professionals interviewed and as a result their experiences may not be generalisable

-No compensation was given to participants for taking part -No ethnicity data of authors disclosed

- Sharing clinician experiences and providing support may assist in increasing clinicians' comfort with the copper IUD as emergency contraception

patients who are requesting EC. Process of inserting the IUD - participants describing having a sense of knowing if an insertion would be successful or not and great care was taken to consider risks of perforation. Described being guided by patients throughout the insertion process, being attune to their pain thresholds. Instances of failed insertions - insertions that were not able to take place due to difficulty measuring the uterus for example. Participants explained support of access to senior colleagues would be helpful in these instances.

Postabortion 2012, Contraception: USA Qualitative Interviews On Counselling and Provision of Long-Acting Reversible Contraceptive Methods

Jessica To explore training. Morse. knowledge Lori and Freedman. attitudes J. Joseph about Speidel, LARC and Kirsten provision M.J. Thompson, post abortion Laura. Stratton and Cynthia C. Harper

Sample: 19 Setting: Abortion clinics

Design: Mixed methods (quantitative paper published elsewhere)

Methods: Deductive and inductive Characteristics: Results:
Professions LARC counselling

included:

advance

other

aiven.

physicians,

practice nurses

and physician

assistants No

demographics

informative was

- Tailored care given, most patients leave with non-LARC contraception. Use of follow-up visits

- Additional visits required for IUDs and complications around risk of pregnancy.
- Perceptions about method safety and risk IUD seen as inappropriate post abortion and for younger patients.
- -Barriers to post-abortion provision: cost of IUD is high and clinic time is limited. Expansion of LARC provision: conferences and training had influenced clinicians positively to wish to provide IUDs, some clinic participal were given as w

Strengths:

+ Large sample size of a range of clinicians from different settings across the country, include clinics which offered LARC for free for low income patients

Limitations:

- It appeared that only clinics where 3 successful interviews had been taken place would received compensation, this didn't state if it went directly to the participants
- -No gender or ethnicity demographics about participants or researchers were given
- Social desirability bias may have influenced findings
- Clinics selected had high rates of post abortion LARC so may be less representative of services as a whole

-Further training in IUDs and other LARCs is needed to expand offer to patients in this group -Difficulties patients and services experience in financing LARC such as IUDs which have high upfront costs

"We have to be mythbusters": Clinician attitudes about the legitimacy of patient concerns and dissatisfaction with contraception	2018, USA	Lindsay M. Stevens	To explore clinician attitudes regarding common patient complaints and concerns about contraception	Sample: 24 Setting: hospitals, private practice, clinics Design: qualitative, semi- structured interviews Methods: Thematic analysis	Characteristics: Professionals included: nurses, midwives, medical doctor Gender: Female (22) Male (2) Ethnicity: White (19), Black/African American (2), Asian or Pacific Islander (1), Hispanic (1) and Unknown (1).	Results: Formal and informal knowledge -Clinicians approaches matched medical literature and patients side effects were viewed in contradiction to this as 'myths' 'Stick with it' -A belief that side effects should be tolerated and will ease with time Race and class in counselling - A perceived patient dislike of hormones, across class and race demographics, in different ways	Strengths: + Purposive sampling used with an aim to reach more clinicians who serve a diverse range of patients Limitations: -A need to have 2 + years in reproductive healthcare and to be able to prescribe may exclude professionals involved in counselling or advising - Only brief comment about homogenous sample with this being described as representative of profession appeared to lack critique or reflection about author demographicsInterviews were held in person and via telephone, no discussion of if this impacted quality No compensation given to participants -No conflict of interest statements given	- For clinicians to carefully assess patients goals, particularly around pregnancy to support best practice and not assume pregnancy prevention is always a matched goal

Patient
clinician
power
relations
in
counselling
on long
acting
reversible
contracept
ion: a
discursive
study of
clinician
perspectives

2023 Tracy New Morison Zealand

clinicians personal hospital identities clinics, and meaning making when patients Design and qualitat clinicians Setting hospital clinicians Setting hospital hospital clinicians Setting hospital hospital clinicians Setting hospital hospi

have

conflicting

priorities

To explore

Sample: 22 Setting: hospitals, clinics, health centres

Characteristics: Gender: Female (19) Male (3)

Ethnicity:
Maori,
indigenous (4),
Pakeha, of settler
descent (12),
Tauiwi, resident
(6) Professions:
Nurses,
gynaecologist,
midwife, general
clinician, social
workers.

Results: Clinician as the promoter of responsible choices

- Promoting and persuading patients that LARCs is a responsible contraceptive choices Clinician as protector - Justifying directive counselling as protecting patients from unwanted pregnancy, prioritising medical knowledge over embodied experience. Clinician as 'empowerer' - Presenting LARCs to

- Presenting LARCs to women as the most empowering option- with the idea of liberation and benefits to women as the crux of the argument.

Strengths:

- + Clearly stated epistemology and model driving methods that is well aligned with the evidence on this topic
- + No conflicts of interest reported
- + No mention of participants being compensated

Limitations:

 Authors demographics were not shared and thereby bias was not discussed -For clinicians and services to consider how clinics that are under-resourced can severely limit the capacity for clinicians to reflect on underlying assumptions and biases

-For training to build on true definitions of patientcentred care and what this constitutes

2.4 Quality assessment

Cochrane guidance for qualitative reviews was adhered to in writing summaries of all the extracted articles (Henderson et al., 2010; Noyes et al., 2018). The Critical Appraisal Skills Programme (CASP) was chosen as a quality assessment tool as it is most commonly used in qualitative evidence, and is recommended by both Cochrane and the World Health Organisation (WHO) (Long et al., 2020; Noyes et al., 2018). The CASP tool was used to evaluate the literature in a qualitative way, without ranking papers in terms of quality or excluding them on that basis (Thomas & Harden, 2008). Using the CASP tool and converting it into a numerical score could be seen as a reductionist and positivist approach that fails to view studies in terms of their own context or overall merit. No papers were therefore excluded based on a quality score. It could be argued that excluding papers could take away from the systematic nature and replication of the review (Dixon-Woods et al., 2006).

See table 6 for a critical appraisal of each study based on the CASP checklist (Long et al., 2020).

2.5.1. Design and methods

The extracted articles all had clear aims, research design and recruitment strategies. However, some studies did not provide sufficient explanation concerning their research design and methods (Biggs et al., 2018), for example, describing analysis as using types of coding but not clarifying the exact methods used (Kavanaugh et al. 2013).

2.5.2. Researcher and participant relationship

Only a few studies included reflections on relationships between the researcher and participants (Berlan et al., 2017; Boydell et al., 2022; Manzer & Bell, 2022; Wemrell & Gunnarsson, 2023); the majority of studies did not include this. Of those studies that did consider the relationships between researcher and participants, their approaches varied from considering researcher influence and social desirability bias in interviews (Bergen & Labonté, 2020; Berlan et al., 2017), to engaging in regular reflection both independently and within their teams (Boydell et al., 2022).

2.5.3. Ethics

Approximately a third of studies failed to provide sufficient data on ethical issues (Amico et al., 2017, 2018; Fleming et al., 2019b; Hoggart et al., 2018; Morison, 2023; Morse et al., 2012a; Stevens, 2018) however the majority did include conflicts of interests statements and did specify that they were submitted to an ethics board, so one could presume such issues were considered but were not elaborated on due to limited word counts in published articles. Due to the nature of interviewing healthcare professionals on their practice, there may have been less of a need to discuss certain ethical issues pertaining to risk or distress which may be a further reason that ethics was not discussed in depth.

2.5.4. Analysis and findings

All studies used analyses that were appropriate for the topic area.

However not many studies discussed if other methods were considered and the reasoning for the choice of method selected, which for the majority was thematic analysis. Across all studies, findings were clear and presented with appropriate detail.

2.5.5. Value of the research

All studies provided clear implications that mostly focused on improved access to IUDs across the lifespan, training for clinicians, advice on coercive practice and increased support for patients. There was clear value to the research across all studies, with actionable clinical implications.

Title	1. Was there a clear statement of the aims of the research?	2. Is a qualitative methodology appropriate?	3. Was the research design appropriate to address the aims of the research?	4. Was the recruitment strategy appropriate to the aims of the research?	5. Was the data collected in a way that addressed the research issue?	6. Has the relationship between the researcher and participants been adequately	7. Results: Have ethical issues been taken into account?	8. Was the data analysis sufficiently rigorous?	9. Is there a clear statement of findings?	10. How valuable is the research?
"out of the loop:" patients' and physicians' perspectiv es about IUD self-removal		Yes	Yes	Yes	Yes	No (see data extracti on)		Yes (2 resear chers codin g, clear theme s and appro priate metho d suffici ent data)	and – discus sed, findin gs relate d to origin al q)	Valuable, Identifies concerns about removal from both and introduce s self removal as decreasi ng barriers
"I wish they could hold on a little longer": physicians' experience s with requests	Yes	Yes	Yes	Yes	Yes	No	Can't Tell (ethic s appro val was sough t but	Yes		Valuable, gave evidence for providers attitudes and biases

for early IUD removal							no detail on first 2 points)			impacting on IUD removal
Pediatricia ns' Attitudes and Beliefs about Long- Acting Reversible Contracept ives Influence Counseling	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Valuable, insight into paediatri cians hesitation about IUDs
"Birth Control can Easily Take a Back Seat": Challenges Providing IUDs in Communit y Health Care Settings	Yes	Yes	Can't Tell (no clear qual metho d explai ned)	Yes	Yes	No	Yes	Yes		Valuable, shows challenge s providers face providing IUDs
The Fine Line Between	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable, gave evidence

Informing and Coercing: Communit y Health Center Clinicians' Approache s to Counseling Young People About IUDs								for how IUD access should be increase d in CHC settings, consideri ng reproduct ive justice
Perspectiv es of obstetricia ns and midwives on the provision of immediate postpartum intrauterine devices: A qualitative service evaluation	Yes	Yes (didn't specif y which type of TA used)	Yes	Yes	Yes	Yes	Yes	Valuable, shows unmet need for PPIUD in maternity services

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"It's a very	_									
	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes		Valuable,
discussion										gives
with every										evidence
woman":										for
Health										targeted
care										care
providers'										given to
communic										vulnerabl
ation										e women
practices										and the
during										high risk
contracepti										of
ve										coercive
										LARC
counseling										
for patients										practice
with										
substance										
use										
disorders										
Provider										
	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes		Valuable,
and Young										provides
Women's										some
Experience										knowledg
s with										e on best
Provider										use of
Self-										PSD
disclosure										
(PSD)										
during										
Emergenc										
v										
Contracent										
Contracept										
ive Visits			<u> </u>							

		VE EXI EIXIEIN					70			
School										
based healthcare providers	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable, shows the
experience s, attitudes and beliefs										barriers to access for
about intrauterine										adolesce nt access
contracepti on										to IUC
Healthcare										
providers' perception	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable in
s of the challenges										assessin g needs
and										for
opportuniti										underrep
es to										resented
engage Chinese										Chinese populatio
migrant										n in
women in										Australia
contracepti										
ve										
counselling										
: a										
qualitative										
interview study										
Inclusion of							Can't			Valuable,
intrauterine	Yes	Yes	Yes	Yes	Yes	No	Tell	Yes	Yes	support
device							(only			for
insertion to							menti			nurses
registered							on of			IUD
nurses'							Ethics			training
scope of										

clinical practice							sough t)			
Understan ding the low uptake of long- acting reversible contracepti on by young women in Australia: a qualitative	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable, identifies barriers to LARC access
study Provider- based barriers to provision of intrauterine contracepti on in general practice	Yes	Yes	Yes	Yes	Yes	No	Can't Tell	Yes	Yes	Valuable, shows a discorda nce between eligibility for IUC and practition ers beliefs
Long- acting Reversible Contracept ion for Adolescent	Yes	Yes	Can't Tell (analy sis	Yes	Yes	No	Yes	Yes	Yes	Valuable, shows disparitie s between views of

	1	1			1		1		1	T 1
s and			not							the IUD
Young			clear)							and
Adults:										suitability
Patient										
and										
Provider										
Perspectiv										
es										
Doctors'										Valuable,
experience	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	shows
of the										factors /
contracepti										barriers
ve										that
consultatio										affect
n: a										contrace
qualitative										ptive
study in										counselli
Australia										ng
Contracept										Valuable
ive	Yes	No (too	No	Yes	Yes	No	Yes	Yes	Yes	in
counselling		detailed		100		110		100	100	showing
of women		and								challenge
seeking		small								s of
abortion –		sample								providing
a		for								IUD post
qualitative		content								abortion
interview		analysi								abortion
study of		s)								
health		3)								
profession										
als'										
experience										
S										
GPs'										Valuable,
perspectiv	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	shows
es on										factors
prescribing										which
proconbing	1	l	L	l	<u> </u>		<u> </u>			***************************************

intrauterine contracepti ve devices										limit IUD access in primary care
The limitations of patient-centered care: The case of early long-acting reversible contracepti on (LARC)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Highly valuable, multiple evidence women are denied LARC removal
removal Interdepen dent Barriers to Providing Adolescent s with Long- Acting Reversible Contracept ion: Qualitative Insights from Providers	Yes	Yes	Can't Tell (both groun ded theory and conte nt)	Yes	Yes	No	Yes	Yes		Valuable, shows barriers to provider confidenc e/patient centered counselli ng in LARC
Providing family planning and	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable, insight into difficultie

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WOMEN'S NEGATIVE EXPERIENCES OF IUD PROCEDURES

reproductiv e healthcare to Canadian immigrants : perception s of healthcare providers										s faced including language and cultural differenc es
Can	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable in showing practice norms faced by paediatri cians in accessin g LARC
New York City Physicians' Views of Providing Long- Acting Reversible Contracept ion to Adolescent s	Yes	Yes	Yes	Yes	Yes		Can't Tell	Yes	Yes	Valuable, shows how knowledg e, skill and environm ent impact on IUD counselin
Claims in the clinic: A qualitative	Yes	Yes	Yes	Highly valuable, shows						

group interview study on healthcare communic ation about unestablis hed side effects of the copper IUD										tension providers experien ce providing PCC and adhering to own training
Experience	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Valuable in showing complexit ies providers face in consideri ng IUD as EC
Postabortio n Contracept ion: Qualitative Interviews On Counseling and Provision	Yes	Yes	Yes	Yes	Yes		Can't Tell	Yes	Yes	Valuable, showed financial and training barriers required for postabort

WOMEN'S NEGATIVE EXPERIENCES OF IUD PROCEDURES

VVOIVIEI	N S INEGALIV	E EXPERIENCE	29 OF 10D FR	OCEDURES		•) I			
of Long- Acting Reversible										ion provision
Contracept										
-										
ive Methods										
"We have										\/ami
	Vo.	V	V	Vaa	Yes	No	NI.a	V		Very valuable,
	Yes	Yes	Yes	Yes	res	INO	No	Yes		
mythbuster s":										shows
										how
Clinician										pregnanc
attitudes about the										y preventio
legitimacy										n can be classed
of patient										and
r										racialized
concerns and										
dissatisfact										by providers
										providers
ion with										
contracepti										
on Patient-										Vam.
	Vo.	V	V	Vaa	Va a	NI.	C'4	V		Very
1.	Yes	Yes	Yes	Yes	Yes		Can't Tell	Yes	Yes	valuable,
power relations in							reii			highlights how
counselling on										marginali sed
long-acting										women
reversible										can
										receive
contracepti on: a										coercive/
discursive										directive
										counselin
study of provider										
										g
perspectiv										
es										

2.5 Synthesis methodology

Thematic Synthesis (TA) was chosen as the analysis tool as this enabled descriptive and analytical themes to be drawn out, while also allowing for a large sample size (Fugard & Potts, 2015; Thomas & Harden, 2008). Further, this methodology was used in most studies included in the review, and so felt appropriate in staying true to both the data (the participants intentions) and the analysis (the author's perspectives and understanding). All papers were uploaded and coded using NVivo qualitative analysis software (Dhakal, 2022).

Thematic synthesis included all of the three stages suggested by the authors (Thomas & Harden, 2008). This included a structure which mirrored the original author's analytic process (Clarke & Braun, 2021). The first stage involved line-by-line coding and the development of descriptive themes (combined stages 1 and 2). This included coding each sentence relevant to the research aims and meaning as well as examining relationships between codes. The next step involved generating analytic themes (stage 3) which includes the interpretations of both the original findings, the authors interpretations and the reviewer's own understanding of the themes that have been synthesised. This final stage is similar to these in meta-ethnography which are referred to as 'third order interpretations' (Britten et al., 2002), meaning the reviewer infers their own meaning onto the data, based on their interpretations and the research question (Thomas & Harden, 2008).

When deciding on the synthesis approach, what constitutes 'data' was carefully considered by the research team. Analysing only participant quotes (first order analysis) was firstly considered but was decided against due to the risk of losing depth and of separating data from its context, typically provided by the author's interpretation (Merten et al., 2015; Sandelowski & Barroso, 2002). The final decision was to treat the entire results section as data, as recommended by the synthesis methodology guide (Thomas & Harden, 2008). This ensured that both the participants intentions and author's interpretations were represented as fully as possible, alongside a further lens of critical realism (Alderson, 2021).

2.6 Main findings from literature review

Table 5- Summary of all themes

Overarching theme 1: Professional responsibility	Subtheme 1: - "I just wanna prevent pregnanciesthat's what guides my conversation" Clinician's aim in preventing unplanned pregnancy (Davis 2014, p40)	Subtheme 2: "I was more concerned in making sure the client was not put at risk and not risking my nursing practice": Clinician concern about risk and regret (Fleming et al. 2017, p30)
Overarching theme 2: Eligibility for IUD	Subtheme 1: "I prefer not to do it in the nulliparous unless they specifically request." IUD as unsuitable for nulliparous women (Hoggart et al. 2018 p85)	Subtheme 2: "I think it's scary for the kids so I'm not so open to it." IUD as unsuitable for young women (Berlan et al. 2016 p48)
Overarching theme 3: Support for the IUD	Subtheme 1: "Clinicians frequently reported trying to "sell" the IUD during contraceptive counselling": the IUD as a product (Amico et al. 2017, p108)	Subtheme 2: "Mirena's the best invention since anti-biotics": The IUD as superior contraception (Kelly et al. 2016, p 121)
Overarching theme 4: Confidence and competence	Subtheme 1: "You need to be quite confident to do [IUD insertions]. Particularly in general practice, where you maybe feel somewhat alone with it and not very supported" Clinician confidence (Garrett et al. 2015 p6)	Subtheme 2: "I wasn't doing enough to keep my skill set up you just become deskilled": clinician competence (Lodge et al. 2017 p331)
Overarching theme 5: Power and removal beliefs	Subtheme 1: "To my disappointment, some patients come back a month later and say, 'I want it out' because they're not willing to put up with the side effects for the six months": beliefs about continuation and side effects (Manzer & Bell, 2021, p4).	Subtheme 2: "Because LARCs require a clinician for removal, clinicians have the ability to the pressure or even coerce patients to "stick with" these methods when they find complaints to be illegitimate": clinician power and self removal (Stevens 2018 p149)

Overarching theme 6: Influence and decision making

Subtheme 1:

"Have you heard of the IUD?" ...I'm smiling right now because I don't try to influence women's decisions, but I do try...I usually their birth control decision sav it's my favourite method": Clinician's personal and professional beliefs intersecting 2020 p248) (Amico et al. 2017 p108)

Subtheme 2:

"My personal value system is that it's really important for women to feel empowered by making": empowerment and informed choice (Biggs et al.

2.6.1 Theme 1: Professional responsibility

Nineteen papers (Amico et al., 2017, 2018; Berlan et al., 2017; Biggs et al., 2018; Boydell et al., 2022; Davis, 2014; Fleming et al., 2019a; Hoggart et al., 2018; Kavanaugh et al., 2013; Kelly et al., 2017; Lodge et al., 2017; Manzer & Bell, 2022; Morison, 2023; Morse et al., 2012b; Murphy et al., 2016; Rubin et al., 2013; Stevens, 2018; Wemrell & Gunnarsson, 2023; Wright et al., 2016) discussed themes around clinicians' feelings of both professional responsibility as well as a responsibility for their patients.

Subtheme 1: - "I just wanna prevent pregnancies...that's what guides my conversation": Clinicians' aims in preventing unplanned pregnancy (Davis 2014, p 40).

In the first subtheme, eleven papers (Amico et al. 2018, Boydell et al. 2021, Davis 2014, Lodge et al. 2017, Manzer & Bell 2022, Morison 2023, Morse et al 2012, Rubin et al, 2013, Stevens 2018, Wemrell & Gunnarsson 2023 and Wright et al. 2016) discussed feeling a need to recommend and counsel for contraception based on its effectiveness for preventing pregnancy rather than other potential considerations. As Dolan et al. (2020) expands, "clinicians felt the effectiveness of contraception should be prioritised over the experience or concern about side effects". At times clinicians appeared to make assumptions about pregnancy concerns being the priority for their patients and it was unclear if the beliefs clinicians had always matched their patients. As Rubin et al. (2013) (p 134) discusses, "the teenager who is sexually active probably ought to have as her number 1 priority not getting pregnant. Therefore, my own bias is to offer her the most effective contraception". In this case, counselling teenagers may justifiably be more sensitive due to the life changing nature of pregnancy, and one may presume in making a decision to be counselled for contraception, these teen patients share the same views as clinicians. Despite this, it is undoubtably important for clinicians to consider their own biases, taking into account historical reproductive harm enacted on certain groups of women (Ross L., 2017).

Subtheme 2: "I was more concerned in making sure the client was not put at risk and not risking my nursing practice": Clinician concern about risk and regret (Fleming et al. 2017, p 30).

In the second subtheme, fifteen papers (Amico et al. 2017, Amico et al. 2018, Berlan et al. 2016, Biggs et al., 2018, Boydell et al 2022, Davis 2014, Fleming et al. 2019, Hoggart et al 2018, Kavanaugh et al. 2013, Kelly et al. 2017, Morse et al 2012, Murphy et al. 2016, Rubin et al. 2013, Wemrell & Gunnarsson 2023, Wright et al. 2016) discussed the different concerns clinicians had about negative IUD experiences, including "risks such as IUD expulsions, infection or perforation" (Morse et al. 2012 p 103) and professional litigation risks.

Clinicians also expressed feeling "guilt and a sense of failure if the IUD did not work for the patient" (Amico et al. 2017 p 109) and "feeling criticized by patients or pushed to take responsibility for something beyond their powers" (Wemrell & Gunnarsson 2023 p 27) in cases where IUD removal was sought, or patients had reported adverse side effects. In these cases, it appeared clinicians felt responsible for patients' experiences of the IUD, despite the many factors (including external) involved in the experience being successful or unsuccessful. Overall, this theme shows how clinicians can experience additional burdens

through their professional responsibilities and how this stress may affect them and their beliefs of themselves as clinicians.

2.6.2 Theme 2: Eligibility for IUD

Thirteen papers (Berlan et al. 2016, Biggs et al. 2020, Davis 2014, Garrett et al. 2015, Hoggart et al. 2018, Kavanaugh et al. 2013, Kilander et al. 2017, Lodge et al. 2017, Morison 2023, Morse et al 2012, Murphy et al. 2016, Rubin et al, 2013, Wright et al. 2016) examined views regarding who clinicians felt IUDs were most suitable for. These papers mostly voiced a belief that women who were nulliparous and/or young were unsuitable for IUD use. The quantity of quotes used for this theme is less than others as many were repetitive demonstrating the same points around eligibility for IUDs. The quotes were selected carefully instead to show the nuance around beliefs for nulliparous and young women.

Subtheme 1 - "I prefer not to do it in the nulliparous unless they specifically request.": IUD as unsuitable for nulliparous women (Hoggart et al. 2018 p 85).

Eleven papers (Berlan et al. 2016, Biggs et al. 2020, Davis 2014, Garrett et al. 2015, Hoggart et al. 2018, Kavanaugh et al. 2013, Kilander et al. 2017, Lodge et al. 2017, Morison 2023, Morse et al 2012 and Rubin et al. 2013) expressed they felt nulliparous women to be unsuitable, with some declining to counsel this group for IUDs while others were "sceptical concerning IUD use in nulliparous women" (Kilander et al. 2017, p12). Some clinicians expressed practical concerns such as the IUD posing "more clinical and logistical challenges, including difficulty dilating the cervices of nulliparous women and/or placing the device in a small uterus" (Kavanaugh et al. 2013, p7). While these characteristics did overlap in some cases, there were clear distinctions when clinicians explained "if they're 16 and they've already had a baby, I have no trouble with it. But when they've not had a child

before...[LARC use for an adolescent beyond insertion] is not the issue, it's more insertion" (Murphy et al. 2016 p 5). These beliefs and experiences were sustained despite clinicians describing training and guidelines having changed to include nulliparous women as suitable for IUDs. On one hand this may demonstrate difficulties in changing entrenched views, while on another it may provide practice-based evidence for examples of more complex insertion needs and clinicians' own concerns for patients during these procedures.

Subtheme 2 - "I think it's scary for the kids so I'm not so open to it." IUD as unsuitable for young women (Berlan et al. 2016 p48)

In the second subtheme, eleven papers covered themes around IUD unsuitability for young women or included discussion around changing attitudes towards IUDs for young women (Berlan et al. 2016, Morison 2023, Biggs et al 2020, Davis 2014, Garrett et al. 2015, Hoggart et al. 2018, Kavanaugh et al. 2013, Kilander et al 2017, Lodge et al 2017, Morse et al 2012 and Rubin et al. 2013). Some clinicians' concerns about young women using IUDs were "based on assumptions about a young patient's risky lifestyle practices" (Morison 2023 p545). These assumptions could be seen to apply the stereotype of younger women as irresponsible in their decision making. On the other hand, depending on their age, clinicians may naturally take on more paternalistic roles and concerns in an attempt to safeguard them from decisions they deem to be unwise or can put them at an increased risk of sexually transmitted diseases.

2.6.3 Theme 3: Support for the IUD

Thirteen papers (Amico et al. 2017, Berlan et al. 2016, Biggs et al 2020, Biggs et al. 2018, Boydell et al. 2021, Charron et al. 2020, David 2014, Hoggart et al. 2018, Kavanaugh et al. 2013, Kelly et al. 2017, Lodge et al 2017, Morse et al. 2012, Wright et al. 2016) showed how clinicians had strong beliefs in IUD benefits and promoted these to their patients.

Subtheme 1: "Clinicians frequently reported trying to "sell" the IUD during contraceptive counselling": the IUD as a product. (Amico et al. 2017, p 108)

Six papers (Amico et al. 2017, Biggs et al. 2020, Kavanaugh et al. 2013, Kelly et al. 2017, Morse et al. 2012, Wright et al. 2016) discussed the IUD through consumerist language, using costing arguments such as "if you actually keep it for 10 years,... it costs you about 13 cents a day." (Morse et al 2012 p 103) and the "patient– doctor relationship...described metaphorically as a 'market', with clients the consumers and customers" (Kelly et al. 2016 p 121). This demonstrates an interesting dynamic which could arguably cause clinicians to focus on the financial aspects of IUD efficiency or place less focus on potential side effects to promote the positive aspects of the IUD. However, the idea of patients also being consumers could place them in a powerful position to negotiate and for doctors to aim for patient-centred practice (Manzer & Bell, 2022).

Subtheme 2: "Mirena's the best invention since anti-biotics": The IUD as superior contraception (Kelly et al. 2016, p 121)

In eleven papers (Amico et al. 2017, Berlan et al., 2016, Biggs et al. 2020, Biggs et al. 2018, Boydell et al. 2021, Charron et al. 2020, David 2014, Hoggart et al. 2018, Kelly et al. 2016, Lodge et al. 2017 and Wright et al. 2016) IUDs were described by clinicians in an overwhelmingly positive manner, with it often being compared more favourably to other contraceptives. Many clinicians focused on the IUD being "highly effective, reliable and 'nonuser dependent" (Boydell et al. 2021, p7) with some referring to it as the "Rolls Royce of IUD contraception" (Kelly et al. 2017, p. 121). This subtheme links with the first subtheme, as the papers gave evidence for the way the IUD was endorsed, while this theme's focus is on the belief clinicians had in the IUD and the "enthusiasm" for its use (Biggs et al. 2020 p 248).

2.6.4 Theme 4: Competence and confidence

Fourteen papers (Berlan et al. 2016, Biggs et al. 2018, Boydell et al. 2021, Davis 2014, Fleming et al. 2017, Garrett et al. 2015, Hoggart et al 2018, Kilander et al. 2017, Lodge et al. 2017, Morse et al 2012, Murphy et al. 2016, Norris et al. 2018, Rubin et al. 2013 and Wright et al. 2016) described clinicians' own estimations of their confidence levels in addition to their competence in IUD counselling and procedures. Although these two concepts naturally intersect, clinicians made clear distinctions between the two. For example, some clinicians described a subjective feeling of a lack of confidence regarding aspects of IUD counselling or procedures, despite having the required training and skills. However, in reference to competence, some discussed lacking the required level of insertion or counselling skills in circumstances where there had not been clinical opportunities to regularly practice these, leading to clinicians losing their skill set.

Subtheme 1: "You need to be quite confident to do [IUD insertions]. Particularly in general practice, where you maybe feel somewhat alone with it and not very supported": Clinician confidence (Garrett et al. 2015)

Eight papers (Berland et al. 2016, Biggs et al. 2018, Davis 2014, Garrett et al. 2015, Morse et al 2012, Murphy et al. 2016, Norris et al. 2018, Rubin et al 2013) described clinicians feeling a lack of confidence when it came to IUD insertions and counselling. One clinician said, "I feel not greatly confident because... I always want to question my interview technique" while others felt increased knowledge helped clinicians have a higher 'comfort level and confidence' (Davis 2014, p 40). This points to a range of individual and systemic factors that can affect clinicians confidence levels.

Subtheme 2: "I wasn't doing enough to keep my skill set up... you just become deskilled": Clinician competence (Lodge et al. 2017 p 331)

Fourteen papers (Berlan et al. 2016, Biggs et al. 2018, Boydell et al. 2021, Davis 2014, Fleming et al. 2017, Garrett et al. 2015, Hoggart et al 2018, Kilander et al. 2017, Lodge et al. 2017, Morse et al 2012, Murphy et al. 2016, Norris et al. 2018, Rubin et al. 2013 and Wright et al. 2016) discussed how clinicians felt the need to keep up their competence with IUD procedures post training. Some clinicians discussed a sense of 'knowing if an insertion would be successful or not during the sounding process', describing practices that relied on instincts and clinical understanding which can be assumed to be gained through extensive experience (Wright et al. 2016 p 525).

However, many clinicians explained the difficulties in keeping up this skillset once trained. Clinicians felt "there is little incentive for clinicians to learn how to provide LARCs", and sometimes made decision not to fit IUDs because "if you're going to do 1 IUD every 3 months, it makes no sense. It's just, you're not going to be doing it appropriately, you're not going to have the right training" (Norris et al. 2018 p 40). This described how some clinicians did not see the benefits in training as they would be doing a dis-service to their patients if they are not regularly involved in IUD procedures and honing the skills required.

2.6.5 Theme 5: Power and removal beliefs

Eleven papers (Amico et al. 2017, Amico et al. 2018, Biggs et al. 2020, Biggs et al. 2018, Charron et al. 2020, Cheeks et al. 2020, Davis 2014, Manzer & Bell 2022, Newbold & Willinsky 2009, Stevens 2018, Wemrell & Gunnarsson 2023) discussed clinicians' beliefs about IUD removals and the power that clinicians hold and subsequent dynamics that can present in patient-clinician interactions.

Subtheme 1 "to my disappointment, some patients come back a month later and say, 'I want it out' because they're not willing to put up with the side effects for the six months": beliefs about continuation and side effects (Manzer & Bell, 2021, p4).

Nine papers (Amico et al. 2017, Amico et al. 2018, Biggs et al. 2020, Biggs et al. 2018, Davis 2014, Manzer & Bell 2021, Newbold & Willinsky 2009, Stevens 2018 and Wemrell & Gunnarsson 2023) reported clinicians' experiences of patient requests for IUD removal that were met with offering different suggestions for continuation. Some clinicians described medicalising side effects after removal requests, with one clinician who "minimized continuous bleeding as acceptable, because it is "expected"" (Stevens 2018 p149) and another who described "intermittent bleeding after her IUD was put in...nothing worrisome, for us." In this case the clinician described a patient finding this difficult for cultural reasons, which hadn't been considered because from a medical point of view these side effects were not usually a concern (Newbold & Willinsky 2009 p 378). Several clinicians gave accounts of what they felt were warranted removals as one described "if there are actual complications, of course [I will remove the IUD]. But if it's just a personal preference or...personal discomfort that seems like they could get over in another six months, I really try to encourage [keeping it in]....Unless they're begging, I don't take it out" (Biggs et al. 2020 p 249) demonstrating that the majority of clinicians felt continuation was the best option as side effects would often reduce with time.

Subtheme 2: "because LARCs require a clinician for removal, clinicians have the ability to pressure or even coerce patients to "stick with" these methods when they find complaints to be illegitimate": clinician power and self-removal (Stevens 2018 p149)

Seven papers (Amico et al. 2017, Amico et al. 2018, Biggs et al. 2020, Biggs et al. 2018, Charron et al. 2020, Manzer & Bell 2021, Stevens 2018) focused on the inherent

power that clinicians hold and the dynamics that can be present between patients and clinicians. This deals with the unique nature of IUDs in regard to the power imbalance that can be created when patients aren't able to decide to discontinue a method, like they could do taking an oral pill for example. The option of self-removal is described by one clinician: "I don't want to be judgmental about this...if she was just like well, I was having spotting, and it had only been six weeks, then I'm pretty sure I'd been annoyed [that she self-removed]" (Amico et al. 2018 p290). Self-removal could arguably be seen to bring back a level of autonomy and power to patients who would otherwise have to rely on clinicians to remove their IUD. It is unclear whether some of the clinicians' frustration may come from concern for the patients' wellbeing during self-removal or from a perceived lack of tolerance for side effects.

2.6.6 Theme 6: Influence and decision making

Seventeen papers (Amico et al. 2017, Amico et al. 2018, Berlan et al. 2016, Biggs et al. 2020, Biggs et al. 2018, Charron et al. 2020, Cheeks at al. 2020, Davis 2014, Hoggart et al. 2018, Kavanaugh et al. 2013, Kelly et al. 2017, Kilander et al. 2017, Lodge et al. 2017, Manzer & Bell 2022, Morse et al. 2012, Wemrell & Gunnarsson 2023, Wright et al. 2016) discussed themes around clinicians' own insights into how they can influence patients and ways they can best support their decision making. The second subtheme had notably less papers than the first, but these themes were chosen to show examples of and amplify clinician's good practice and acts to empower patients.

Subtheme 1: "Have you heard of the IUD?" ...I'm smiling right now because I don't try to influence women's decisions, but I do try...I usually say it's my favourite method": Clinicians' personal and professional beliefs intersecting (Amico et al. 2017 p 108)

Thirteen papers (Amico et al. 2017, Berlan et al. 2016, Biggs et al. 2020, Biggs et al. 2018, Charron et al. 2020, Cheeks et al. 2020, Davis 2014, Hoggart et al. 2018, Kavanaugh et al. 2013, Kelly et al. 2017, Kilander et al. 2017, Wemrell & Gunnarrsson 2023, Wright et al. 2016) discussed how clinicians' own personal opinions and "preferences" about the IUD can act as an influencer in their counselling practice (Biggs et al. 2020). Some clinicians recognised how this can act as a bias for presenting their preferred methods: "my agenda is definitely not the patient's agenda and I need to match my counselling to what that patient actually wants and needs and not...what I think that she should have" (Charron et al. 2020, p. 352). This demonstrates the fine line between clinicians making personal and professional judgements, which can be a difficult distinction to make in already time pressured contraceptive counselling appointments. In other examples, some papers discussed how clinicians used personal self-disclosure as one tool of influence by presenting their own experience: "Lindsey felt self-disclosure of her contraceptive use could be an important tool to help prevent women from feeling pressured to choose a method, given historical reproductive health injustices" (Cheeks et al. 2020 p 280). This was grounded in context of trying to bridge the gap between clinician and patient and provide a personal experience that was intended to help further inform the patient's decision making.

Subtheme 2 - My personal value system is that it's really important for women to feel empowered by their birth control decision making": empowerment and informed choice (Biggs et al. 2020 p. 248)

Eight papers (Amico et al. 2018, Berlan et al. 2020, Biggs et al. 2020, Davis 2014, Lodge et al. 2017, Manzer & Bell 2022, Morse et al. 2012, Wright et al. 2016) discussed how clinicians believed in the importance of providing patients with detailed information about all types of contraception to help them make informed decisions. Clinicians showed insight and reflexivity into the influential role they play and made active efforts to give autonomy back to patients, aiming to provide them with balanced information to make the best decision for

them. For example, one clinician explained viewing his "job as a doctor to give them the choices and allow them to make an informed decision" (Berlan et al. 2016 p 49), which shows the clinician acting in a neutral way, providing options without giving weight towards any one method.

2.7 Discussion

This SLR has shown the complex interplay that clinicians are faced with when involved in IUD procedures, as well as how their own beliefs and perceptions impact on this process of counselling and fitting. It has demonstrated clinicians' beliefs about their professional responsibilities, who they believe is eligible for the IUD, their beliefs about removal procedures and the power they hold as well as their perceptions of their own influence and role in supporting decision making. It has also shown clinicians' own perceptions of personal competence and confidence in counselling for and administering IUD procedures, alongside demonstrating their support for the IUD.

As the results demonstrated, clinicians described feeling a sense of responsibility for preventing pregnancies. Clinicians also showed a particularly strong sentiment in preventing teenage pregnancies and described how attitudes towards this can at times bias their approach. This may intersect with other themes such as a strong support for the IUD, beliefs about removal, and influence and decision making, which could be argued to create a paradox as the promotion of LARCs such as the IUD could undermine reproductive autonomy (Gomez et al., 2014). This raises the point of a need to respect reproductive rights and be aware of one's own biases and judgements, understanding that all women across the lifespan should feel in control of making decisions regarding their own fertility. Providing a structured approach to contraceptive counselling has been shown to be highly effective in providing patient-centred care for women. This has been trialled by approaches which carefully assess women's preferences, needs and concerns and using this information to tailor counselling to provide women with a broad range of options and information (Bitzer et

al., 2021). This has led to women feeling more confident and supported in their decision making, and to improved continuation of methods (Garbers et al., 2012).

Clinicians also displayed concerns about risk to patients and their own professional liability, which intersects with perceptions about who is eligible for the IUD. confidence/competence and decision making. Clinicians expressed a sense of personal responsibility for IUD failure, showing the additional burdens some clinicians experience when procedures do not go to plan, or when a patient requests removals. Previous literature speaks to this idea of professional responsibility, with gynaecology recognised as a highly litigious area (Jha & Rowland, 2014). Further, evidence suggests that doctors of various specialities report being 'overburdened' with responsibilities which can lead to burnout and serious mental health consequences (McManus et al., 2002). This is further evidenced by concepts such as cognitive overload, which have been described as rife in healthcare, resulting in doctors being faced with multiple competing challenges. This can include emotional burnout and elevated biological stress due to working in environments that do not match up with their own resources or needs, leading to worse decision making and outcomes for patients (Privitera et al., 2015). Therefore, the results demonstrate some of these competing concerns for doctors administering IUDs: concerns about risk to patients, risk to own professional liability, understanding IUD eligibility, concerns about IUD failure or discontinuation and their own feelings of competence and confidence.

Linking to this, evidence concerning eligibility for IUDs has been shown in other reviews, which found similar results of less willingness to provide young or nulliparous women with IUDs. Clinician reasoning included having concerns about difficulties with insertion, pain, and infertility (Black et al., 2013; Buhling, Hauck, et al., 2014). One review provided evidence for these claims as it found higher rates of pain and insertion difficulty and failure in nulliparous women, although the studies included were deemed to be of poor quality (Foran et al., 2018). Previous global reviews have also found that clinicians have concerns about risk with the IUD, which may be more present if patients are younger or nulliparous (Daniele et al., 2017). This reluctance to provide IUDs to younger women has been reported as being due to

perceived risks around lifestyles and exposure to sexually transmitted diseases (Morison, 2023). The presumption is that younger people are more likely to engage in risk-taking behaviour if they had the assurance of the IUD protecting them from pregnancy. This demonstrates the need for clinicians to be aware of their judgements and understand when this interferes with counselling and contraceptive options for women.

However, some research indicated that gynaecologists are more likely to consider IUDs for young and nulliparous women compared to family doctors (Harper et al., 2012). There may also be factors such as clinical setting which are involved in sharing information and training, with some gynaecologists being more likely to work in specialist areas. This may suggest more specialist training can help in supporting clinicians to understand more about eligibility for groups of women.

The results also found that both competence and confidence were key in clinicians abilities to provide IUD counselling or undertake procedures. This showed how clinicians felt they had limited training or even with appropriate training, limited opportunities to practice their skills which also linked to subjective feelings of confidence. Further research linking to the confidence and competence theme were found within global research that suggested insufficient knowledge and training led to clinicians' reluctance in providing IUDs (Adjei et al., 2015; Khan & Shaikh, 2013; Rupley et al., 2015). Evidence suggests that current UK paediatrician and GP training lacks focus on gynaecological issues (Cosgrave et al., 2020), and that there are high waiting lists (Ma & Shah, 2016) for those requiring training. Whether the clinical workforce is able to provide the best care for their patients is therefore uncertain.

In addition to this, there has been further evidence to suggest clinicians can show some bias in contraceptive methods based on personal experience. As shown in themes around the support of the IUD and clinician influence, reviews have found some associations between the methods that clinicians use and the methods they recommend to their patients (Daniele et al., 2017). This suggests clinicians may be more likely to recommend contraceptive methods if they have had good personal experiences with them. While there have been examples of tools such as self-disclosure being used to help women feel more at

ease and on an equal footing with their clinician (Cheeks et al., 2020), clinicians should aim to tailor contraceptive discussions and advice to women's own personal gynaecological and contraceptive needs (Cheeks et al., 2020). It is however understandable that such guided decision making using personal beliefs can occur in time pressured environments where clinicians feel they may not have the sufficient space to provide thorough assessments (Privitera et al., 2015).

With regard to themes of removal, previous research has found concerns about removal requiring a healthcare clinician (Gomez & Clark, 2014) and the potential for them to refuse to remove the device (Yinger et al., 2013). This may point to a need to consider the suitability and practicalities of self-removal and clinicians roles in counselling for self-removal, especially as it has been shown to be a facilitating factor in consideration of the IUD (Lessard et al., 2012). As the concept of self-removal gains traction (Amico et al., 2020; Foster et al., 2014), it is important to consider the risks. One study found patients cited safety risks as their main concerns around self-removal while clinicians mostly expressed concerns about not being involved in the discussion (Amico et al., 2018). Research has suggested helping to support individuals with resources for self-removal, counselling related to self-removal and the option of clinician support helped to provide a balanced approach of supporting patient autonomy (Amico et al., 2018; Stimmel et al., 2022).

The results demonstrated the power clinicians can hold in interactions around decisions to continue the IUD, removals and responding to reported side effects. Results described clinicians making judgements about patients experiences of side effects and their beliefs around legitimate discontinuation reasons. There is a need to further explore ideas around power dynamics in medicine, particularly when patients are more vulnerable and in need of contraceptive support. Research suggests doctors can discriminate on the basis of a patient's socioeconomic status and race, dismissing patient concerns about contraception as issues with the patients themselves (Mann et al., 2022). This also links to a need for appropriately validating side effects, with research into pain demonstrating how clinicians can

underestimate pain, with more experienced male physicians underestimating female pain, particularly those related to gynaecology (Miron-Shatz et al., 2020). This ties further to themes of decision making and influence, with clinicians moving away from roles of gatekeeping contraceptive discontinuation. This can create a potential for coercion which needs to be considered carefully, given past history and links of LARCs and forced sterilisation (Boydell et al., 2023; Meier et al., 2019; Senderowicz & Kolenda, 2022).

2.8 Strengths and Limitations

Overall, this SLR is a robust review into clinicians' perceptions and experiences of IUDs. It is the only qualitative systematic review into this field pertaining to high income countries.

The search strategy was carefully developed with expert involvement and allowed for a variety of data to be extracted from both grey literature and peer-reviewed sources. The exclusion criteria helped to select countries which had healthcare systems and population that would be most relevant to a UK context, but this may have been a limitation as some diversity of clinicians' ethnicities across the samples were lacking. Further to this, one of the key limitations found during the quality appraisal discussed researchers lack of discussion or reflection on the researcher-participant relationship as well as a lack of demographic information provided. Taking into account the disproportionate harm ethnically diverse women may experience, there should be a need for considering diversity of staff recruited for research purposes alongside enquiry into issues of inequity in healthcare.

Additionally, while the screening process had two reviewers throughout, the quality appraisal process was not able to achieve the same due to time restrictions, availability and number of studies included in the final sample. Involving a second reviewer in this process would have benefitted the project by giving another perspective and further insight into characteristics of the chosen studies. However, due to the decision being made to include all studies and not exclude on the basis of quality, this may have had less of an impact on the

review itself. As the quality appraisal assessed all studies to be of good quality, there is a further degree of confidence in the findings overall. However, some papers notably provided a lack of demographics data on researchers, participants and populations served, which could impact the generalisability of the findings.

Further, the large sample size allowed for analysis of studies which had direct quotes from participants and author interpretations. On one hand this could provide multiple perspectives and a richer context to the data, while a limitation of this could be that the author interpretation analysis may move further from the participants' voice or intentions. Including further examples in grey literature such as reports and recommendations, as well as papers reporting on mixed methods, may have added to the richness of our data.

2.9 Implications and recommendations

This SLR demonstrates the experiences and difficulties clinicians can face during IUD procedures and counselling. Clinicians highlighted several logistical concerns that impact on delivery such as long waiting times for insertion and limited appointment times. Both of those impact on service delivery but also on clinicians' sense of responsibility to provide IUDs to patients either for gynaecological treatment or contraception in a timely manner. Issues of short and one-off appointment slots can also make it difficult to provide personalised care (Bitzer et al., 2021) and has shown to produce worse outcomes and implications for patients (Privitera et al., 2015). One of the ways of addressing this could be to have a range of staff trained in supporting different aspects of IUD counselling and procedures. For example, evidence has shown support for widening nurses' scope of practice (Fleming et al., 2019a) and the use of health educators to support with training and knowledge provision (Davis, 2014). This would enable appropriately trained professionals to help to provide support which could help reduce waiting lists for treatment but also provide a more holistic and personalised approach to care, helping to enhance informed decision making and increase the likelihood of continuation. Further to this, evidence has shown medical educators as

being described as underused resources which could help to fill some of the training gaps for doctors in the UK (Ma & Shah, 2016).

Failing to establish good relationships between patients and clinicians has many important implications for IUD care. This can have an adverse effect on contraceptive counselling, decision making, information provision and responses to removal requests. As the results demonstrated, the way power and decision making operates can lead patients to take matters into their own hands in the form of risky practice such as self-removal or searching the internet for advice or validation for their concerns (Amico et al., 2018; Foster et al., 2014; Stimmel et al., 2022). This could result in damaging trust and relationships with individuals and communities, increase anxiety in attending gynaecological appointments and screenings all of which could lead to less engagement with services and avoidance of potential health concerns (Yanikkerem et al., 2009). One way of addressing some of these issues related to practice, which can be seen as coercive and at higher risk with marginalised communities (Senderowicz, 2019; Senderowicz & Kolenda, 2022), could be through the use of community level approaches which can help empower patients and assist in informed decision making (Dolan et al., 2020). One example of giving power back to patients could be facilitated through counselling for self-removal. Future research is needed in this area to establish best techniques for safe self-removal including considering length of strings, use of gloves and best positioning for success (Cartwright et al., 2022).

Future research should focus on the experiences of clinicians in these settings, without the predominant focus on just improving access and promotion of LARCs to patients. This is key to reduce burnout, paying attention to the wellbeing of clinicians that run the risk of experiencing moral injury and mental health difficulties (McManus et al., 2002; Privitera et al., 2015).

2.10 Conclusions

Overall, this SLR suggests clinicians need support and training to assist with IUD procedures and delivery. Most of the research is currently focused on interventions and their successes rather than on clinicians' own experiences. Of the research that does attempt to focus more on clinicians' experiences, this is often lacking depth and aims to improve promotion and increase access to IUDs, rather than addressing clinicians concerns or improving existing procedure experiences for patients. Without addressing this, clinicians can face moral injury by attempting to work in an environment that appears to be contradictory to patient care (Bailey, 2020).

2.11 Rationale for current study

The findings presented thus far have demonstrated some competing concerns for both clinicians and patients, suggesting a need for research into IUD experiences in the UK.

There is a strong argument for a need to centre the patient's experience, particularly in a sensitive area such as gynaecology where patients are described as particularly vulnerable (Gibbins & Lo, 2022). There is currently a lack of qualitative and UK based research into women's experiences during gynaecological procedures such as IUD insertion and removal. In recent years, women have expressed a variety of negative experiences during these procedures and these have been documented mostly in grey literature (BBC, 2021; Moran, 2021; Moss, 2021). As research into women's health is a developing field, evidence has suggested there is a lack of equity for women's access to and experiences within healthcare (Borrell et al., 2014; Marmot, 2020; Perez, 2019; Samulowitz et al., 2018).

The research that is available has tended to be quantitative studies that focus on a variety of experiences, often weighted towards the more favourable experiences and crucially outlining the positives of LARCs (Robinson et al., 2008). This area of research is significant as LARCs are often promoted due to their perceived success at preventing pregnancy and cost-effectiveness when compared to other contraceptives (Mavranezouli,

2008). Likely due to this, LARC prescription is on the increase, with more clinicians recommending them and advising women on their suitability across the lifespan (Pasvol et al., 2022; Rowlands & Ingham, 2017).

While there has been some research into LARCs, the research into IUDs has been more limited and is needed due to the invasive nature of the procedure compared to other forms such as the implant (Espey & Ogburn, 2011). Research has highlighted a high proportion of women experienced the procedure to be more painful than anticipated (Balderstone, 2022). Further evidence suggests that clinicians can underestimate the pain of this procedure and that there can be a discrepancy between patient and clinician's assessment of the pain (Maguire et al., 2014; Miron-Shatz et al., 2020). Research using data from social media has also highlighted predominately negative themes on the topic of IUDs such as distrust in healthcare professionals (Wu et al., 2023).

3. Methodology

3.1 Overview

This section reports on a qualitative study, exploring experiences and perspectives on IUDs but this time from the viewpoint of patients. It includes detail on the qualitative methodology used and the subsequent analysis performed. Information on the steps taken during each part of the study set up, including design, demographics of participants, recruitment and data collection, are provided. Ethical issues, patient and public involvement (PPI), and issues of equity and data analysis are described (Gibbins & Lo, 2022). Quality, validity and approaches to self-reflexivity are also discussed (Pezalla et al., 2012).

3.2 Aims

The aim of this research was to consider women's negative experiences of IUD procedures (insertion and removal) and the factors that can make them distressing. Factors to be explored included feelings of distress both before, during and after the procedures; women's perceptions, experiences of and relationships with professionals; how conversations around pain and distress were approached; and any psychosocial implications following these procedure experiences.

The key aims for this research were to provide some insight into this overlooked area, summarise the factors that can lead to distress in procedures and explore what could help to reduce this. Finally, results were conceptualised into clinical implications that can serve to assist both patients and clinicians.

3.3 Design

This was a qualitative study involving semi-structured interviews. The decision to use semi-structured interviews was made considering previous research that had been completed, and what was needed to address the gaps identified. The existing body of work in this field is largely quantitative, focusing on perceptions of pain, pain measures and effectiveness of different pain relief options, with little attention given to patients' experiences of procedures including of pain and/or distress (Balderstone, 2022; Callahan et al., 2019; Nguyen & Allen, 2018; Schmidt et al., 2015). It was therefore felt using a qualitative approach, and 1:1 interviews in particular, would be a way of exploring experiences of procedures in depth and seeing if there are any common patterns that occur in negative experiences. Individual interviews were chosen over focus groups to minimise the risk of individuals feeling led by others experiences or feelings, and due to the sensitive nature of the topic which could be difficult to communicate in a group setting. This is evidenced in the literature which suggests women can make more verbalisations about a sensitive topic in individual interviews compared to focus groups (Kruger et al., 2019).

3.3.1 Rationale for using reflexive thematic analysis

Interviews were analysed using reflexive thematic analysis (TA) (Braun & Clarke, 2021a; Brinkmann, 2014; Jowett et al., 2011). TA is a form of qualitative analysis which involves the process of coding a dataset into descriptive, then analytic themes, with an aim to interpret and understand any patterns that may appear to present. In terms of types of TA, reflexive TA was chosen as it is most closely aligns with the chosen epistemological stance, being centred on the practice of reflecting on one's own role as a researcher and how this influences practice and the process (Clarke & Braun, 2021). Reflexive TA is also particularly good for finding patterns and gaining a deep level of insight into the data studied, with the aim of being able to produce a form of analytic story which captures both nuance and complexity (Joy et al., 2023). Other types of TA were considered but excluded on the basis

that they prioritised consistency of codes, identifying themes early and taking the position that researcher subjectivity should be strongly controlled using multiple coders (Braun & Clarke, 2023b; Hopewell et al., 2005). The approach to subjectivity also played a part in deciding to use TA over other qualitative methods due to the dual insider/outsider positioning for this research, which is considered to be key as part of owning one's position using reflexivity in research (Clarke & Braun, 2021; Elliott et al., 1999). This was also considered appropriate for the feminist lens adopted, as feminist theory advocates for the use of qualitative research which aims for the establishment of non-exploitative relationships in research, while aiming to reduce the less visible and often distorted experiences women have (Murray & Chamberlain, 1999).

3.3.2 Rationale for exclusion of alternative methodologies

Reflexive TA was chosen as more appropriate compared to other methods as it felt the study itself and the critical realist positioning, alongside the insider/outsider research perspective taken felt most appropriate (Harper, 2011). This was considered compared to Interpretative Phenomenological Analysis (IPA) and grounded theory approaches which can focus on how the participant subjectively experiences certain phenomena and the development of concepts into theory (Harper, 2011; Jørgensen, 2001). Neither of these felt suitable for the project aims as while a key focus was on participants' experiences, this was to be considered within context and an understanding that there can be multiple truths. On the other hand, solely focusing on singular, subjective experiences may make the data less generalisable. Similarly, the development of concepts into theories did not match the intention of using the data in a pragmatic sense to consider actions which can be implemented to directly impact future care.

3.4 Participants

Participants' eligibility was carefully considered to ensure alignment with the research aims while also aiming to take an inclusive approach.

The Inclusion criteria were as follows:

- Anyone with female anatomy regardless of gender identity
- Aged 16 and over
- Those who have had an IUD procedure (insertion and/or removal) in the last 2 years in a UK health setting (e.g. GP, sexual health clinic, outpatient setting, private health setting)
- · Any ethnicity
- Nulliparous or parous
- Residing in the UK. Participants were required to provide an address as part of the screening for imposter participants (Ridge et al., 2023).

Following this, there was only one main exclusion criteria:

• Anyone currently seeking treatment for a severe or debilitating mental health disorder that was currently causing them severe distress. This exclusion was considered carefully but agreed so that the interview process would not trigger any painful or distressing memories which could cause further distress. The aim was not to exclude individuals on the basis of any specific mental health disorder or involvement of services. It was deemed important to consider this as the recruitment process was online and participation could be unethical if a participant was caused unnecessary distress by the interview questions or topic area. This exclusion was not a blanket rule and all individuals wishing to take part were treated on an individual basis. No participants wishing to take part were excluded from the study on this basis. All participants were screened prior to taking part and this involved a careful discussion

of the subject matter and their experience in brief, in order to assess if they felt able to participate in the research safely and would not be at risk of harm if doing so.

An assessment was made jointly with the participant as to whether they thought they could discuss the topic in depth and their own safety was prioritised throughout this process.

3.4.1 Sample

Participants who had had IUD procedures within the last 2 years was chosen as the cut-off period. An earlier cut-off was initially considered; however, it was felt that this would exclude some participants. Due to the lack of research in this area, it felt important to be inclusive to as many participants as possible. This time period was suggested as there is evidence that has shown events that are negative are more likely to be remembered for several years, with averages of 5 years for traumatic and 3 years for non-traumatic events. Further, negative memories averaged just under 3 years for moderately negative and 4 years for intensely negative memories (Bohanek et al., 2005). Participants were briefly asked about the procedure in a pre-screening (see below) and they needed to be able to remember the experience in enough depth to recall details of the procedure and the experience.

While there was no formal purposive sampling, the aim was to try to include a mixture of participants that were both parous and nulliparous. This included trying to gain an equal sample of participants across different age categories. Participants that registered interest in the study were screened chronologically as they provided their details, so no participants were prioritised or purposively sampled on the basis of demographic criteria.

We considered minimum/maximum age but decided not to put a maximum on the basis given that IUDs are used for treatment for menopausal symptoms and a variety of gynaecological issues (not just contraceptive use). In terms of minimum age, 16 was selected. Whilst in some cases, individuals under the age of 18 are required to have parental/guardian consent for research involvement, it was felt that given that women under the age of 18 are able to receive contraception without parental consent that they should

have autonomy to consent to take part in this study (Falagas et al., 2009; Piercy & Hargate, 2004; Rogstad et al., 2013).

The sample of up to 20 participants was aimed for and recruitment stopped after this number was reached due to limited resources being available. This sample was considered suitable based on the methodology chosen (Braun & Clarke, 2021b). A substantial number of potential participants (65) registered interest to participate but unfortunately due to researcher limitations around time and financial restrictions, they were not able to be interviewed.

3.4.2 Procedure and recruitment

Participants were recruited using social media and online advertising through relevant forums including Instagram, Twitter, Facebook, GP forums, and Mumsnet. One additional forum which the study was advertised on was a registered charity, the Patient Safety Learning Hub (https://www.pslhub.org/) which shares knowledge and discussion boards regarding any learning opportunities within NHS services. This led to meeting with the patient safety manager who helped to publicise the study on her social media. The study was advertised online using an electronic version of the study poster and research information sheet. This directed interested individuals to an online consent and demographics form which participants could fill in if they wanted to register interest to be contacted.

Issues around imposter participants was considered and additional measures such as providing an email and address were required in order to submit the online form (Ridge et al., 2023). A participant information form was provided to participants for details on the study and what it entailed (please see appendix C). Once they had registered, they were contacted to arrange a pre-screening conversation to briefly discuss their experience (to check sufficiency of recall), to conduct a risk and mental health screen, and to give participants the opportunity to ask questions. In terms of screening measures and risk assessing, the

exclusion criteria around mental health was treated on an individual basis. This approach involved risk assessing to see if the participant was able to take part in the interview or if they needed any adaptations which would enable their participation. The risk assessment involved briefing the participant on the questions that would be asked during the interview and checking their suitability and ability to discuss this. The detailed risk assessment is included in appendix D. Some participants who were contacted did not end up participating due to not meeting the inclusion criteria with their specific experience, however, no participants were excluded from participating due to a mental health difficulty.

After participants had agreed to participate, an interview was arranged. All participants were offered the choice of participating either online or in person, in a confidential university space. The intention behind this was to centre inclusivity so a variety of participants were able to access the research. All participants expressed a preference to complete the interview via online video on Microsoft Teams. Whilst it can be argued that a higher quality of relationship can develop in person than online, resulting in richer data, making the participants feel comfortable was of paramount importance and this included telling their story in a place that felt safe and comfortable for them. I also used skills from working virtually in clinical practice to ensure the quality was not affected by conducting the interviews in this manner (Jowett et al., 2011).

3.4.3 Remuneration

Participants were given £10 in vouchers as a gesture of gratitude for giving up their time and speaking to us. This is in line with evidence and best practice, also recognising that our participants are women who are often unpaid for their labour (Hoskyns & Rai, 2007). Additionally, at the time the study was conducted, the UK was undergoing a cost-of-living crisis (Haughton & Frith, 2023).

3.4.4 Participant characteristics

The majority of participants identified as English/Scottish/Welsh (90%), Italian (5%) and Indian (5%). Participants were split between nulliparous (55%) and parous (45%) and their age ranges were 20-24 (15%), 25-29 (10%), 30-34 (10%), 35-39 (25%), 40-44 (15%), 45-55 (25%). The majority of participants lived in areas which scored low on the indices of deprivation (Payne & Abel, 2012). See appendix E for an example.

3.5 Data collection

An interview guide was formulated to guide the interview through a series of topics, designed to be delivered in a flexible and semi-structured format. The topic areas covered the experience of insertion and/or removal, experience and relationship with the clinician, provision of information pre and post procedure, reason for the procedure, any relevant psychosocial factors, experience of pain and management, experience of distress and management, any side effects following the procedure, and their relationship to the coil following their experience. The interview guide was formed in consultation with the research team which included an expert by experience member (see section 3.7 below) who also took part in a pilot interview. Details of the interview guide are given in appendix F. Once 20 interviews had been conducted, data collection stopped, and the interviews were transcribed by the main researcher (SP). Participants names have been changed to pseudonyms for women who were part of the suffrage movement (Crawford, 2003). Please see Appendix G for examples of interview extracts.

3.6 Ethical considerations

3.6.1 Confidentiality and consent

The research was conducted once all ethical approvals had been approved by the committee for health, science, engineering and technology (ethics protocol number: LMS/PGR/UH/054354, see appendix H). All participants were given information about the research in written form and had the opportunity to discuss the research during the screening stage to enable them to make an informed choice. They were given examples of the possible advantages and disadvantages of taking part, and informed that whether they decided to participate or not, their healthcare would not be affected by this decision. Participants were informed that their participation was entirely voluntary, and they would consent to participate but could also withdraw that consent at any point, without needing to give a reason. As part of this process, participants gave consent for their data to be used for this study as well as being stored in the university archive with a potential option to be used for other studies (though participants could withdraw their consent for this).

In terms of confidentiality, participants were informed that their interview data would be anonymised and kept confidential, meaning that any identifiable information would be removed so that the interview could not be linked to them. They were informed of the limits of confidentiality which were that if they were at risk, or others were at risk from them, then researchers would have a duty of care to act to help and to refer to a relevant body if appropriate.

3.6.2 Participant distress and trauma

The welfare of participants was a priority that was considered in both the setting up of the study and throughout. This was due to the nature of the topic and considering the distress participants had already gone through (Grossman et al., 2021). Research in clinical and maternity settings shows some evidence for debriefs after distressing events being

helpful in providing women with a space for reflections and an opportunity to tell their story (Baxter et al., 2014; Scott et al., 2022). Whilst not considered (or 'advertised') as an opportunity to debrief, these principles were considered when creating the interview guide, in particular to be mindful of the participant's experience of the interview and to create an environment that was reflective but respectful of clinical and research boundaries.

The main concerns around participant distress were during and after the interview, in case the conversation, certain questions or topic areas triggered a painful memory or emotional response. In situations where distress could have occurred or was anticipated to occur, there was a plan in place to give participants space to pause or end the interview, alongside providing a debrief on the day as well as the day following if needed. Further, the researcher had compiled information on self-referral to appropriate wellbeing services or sexual health clinics which could be offered to participants in this eventuality (Draucker et al., 2009). Please see Appendix D for details of the risk protocol.

3.7 Equity, inclusion and experts by experience

3.7.1 Consultants and experts by experience

The research team consisted of several different professions and specialities.

Alongside the immediate supervision team, there were two consultants and one Expert by Experience (EbE) member. One consultant held medical expertise in primary care and general practice, and another was a researcher and consultant in a specialist coil clinic. The EbE member had first-hand experience of a distressing coil experience and was an undergraduate within a healthcare profession. One consultant was recruited through a member of the supervision team and the other consultant was contacted via email due to a SLR protocol they registered which was of interest to the study. The EbE member was recruited from the public using social media and sharing advertisements with other researchers.

A wealth of evidence and guidance from the National Institute for Health Research (NIHR) affirms the benefits of patient and public involvement (PPIE) in health research in helping to improve quality and implementation into practice (Aiyegbusi et al., 2023; Moult et al., 2023). The guidance also states a need for fair payment of individuals involved and this project prioritised using this for EbE involvement. Due to budget constraints, this was not able to be provided for the consultants involved but their participation was due to personal interest and alongside the EbE member, they decided on a level of contribution that was appropriate for them (Moss et al., 2016).

In terms of involvement, the consultants and EbE member met to discuss the research at several stages of the project. This included setting up the study and associated advertisements, development of the interview questions as well as data analysis and associated clinical implications. The EbE member also took part in a pilot interview before data collection began to trial the questions and see how they landed based on their own experience. Due to scheduling and time constraints for all members of the team, meetings often took place separately. Meetings with the consultants often served as fact-checking opportunities due to their specific expertise as well as exercises in reflexivity and reflections on my own positioning outside of the medical profession. Meetings with the EbE member also served as a point of reflection as well to undertake member-checking to see how their experience had mapped onto initial themes or ideas. For further details on the reflexive process during EbE meetings, please see appendix B.

3.7.2 Inclusion and equity considerations

Considerations regarding inclusion have been a continuous aim throughout this research, however, putting this into practice hasn't always translated. The same inclusion principles were applied when recruiting participants, consultants and EbE members. When recruiting for EbE members, advertisements included prioritising people that were from the Global Majority (Campbell-Stephens & Campbell-Stephens, 2021).

The use of accessible materials was considered through the use of a study poster (see appendix J) that was a simplified version of the larger participant information sheet which participants could use to contact the researcher. The study materials were advertised online. This was considered to provide the best reach for participants from a range of ages, backgrounds, and geographical locations within the UK. However, this also presented limitations, in that this approach will have excluded those with restricted/no digital access or limited digital literacy. As described previously, participants who were recruited were able to choose which environment they were able to participate in which helped to ensure participation did not impact on paid or unpaid labour responsibilities that women often face (Hoskyns & Rai, 2007).

3.8 Analytic process

The process for reflexive thematic analysis was followed as indicated in guidelines and worked examples (Byrne, 2022; Clarke & Braun, 2021). The way of approaching the data was considered using a mostly inductive approach, as this is arguably more aligned with the chosen epistemology and is a way of attempting to convey the meaning intended by the participants (Clarke & Braun, 2013). However, it is understood that the process of analysis rarely fits into one of the inductive/deductive approaches without using elements of the other. Therefore the approach taken was to use an inductive approach to consider meaning intended by participants while using an element of deductive analysis to ensure the data selected fit with the research question and the origin of the study, which would involve the researcher's own knowledge and understanding of theory (Braun & Clarke, 2019, 2021; Clarke & Braun, 2013). Considering pre-conceived ideas, knowledge and theory, a series of exercises in reflexivity were undertaken throughout this process and will be explained in further depth in the next section. Please see Table 6 for details of the data analysis process.

Phase 1: Familiarisation with the data	This process normally involves the researcher reading and re-reading the data in order to immerse themselves with it. For this research this involved the main researcher doing so while also transcribing the data which helped with the process of familiarisation. (Byrne, 2022).
Phase 2: Generating initial codes	Codes were generated by going through each line of the data and providing short and descriptive labels for those that were relevant to the research question. Care was taken to follow the guidelines to provide codes that were succinct but not merely descriptive; codes were created to provide context and aimed to be written in a way that does not rely on the reader having knowledge of the underlying data extract. Extracts of coded transcripts are shown in appendix K.
Phase 3: Generating themes	The process of generating themes was considered as intended by the authors. This was understood as not passively emerging from the data but rather being a process of development, occurring through the intersection of the data, the researcher's own assumptions and knowledge as well as their analytical skill and resources (Braun & Clarke, 2023a). This process began by separately codes that shared similar underlying concepts and developing these further where there were similar patterns of meaning (Byrne, 2022; Clarke & Braun, 2021). Please see appendices L and M for extracts of initial theme development and progression.
Phase 4: Reviewing potential themes	This process involved several stages of reviewing initial themes to judge their quality, their inclusion and exclusion of codes and data as well as general coherence (Byrne, 2022). This involved considering if the themes had central organising concepts which included considering carefully what it is that holds the theme together and which codes may or may not fit this concept (Clarke & Braun, 2021).

Phase 5: Defining and naming themes This stage involved checking that each theme had internal consistency and as a collective, each theme told a story that was individual and not replicated in other themes. Following this, the themes were also considered collectively to ensure they all formed a narrative which held the research question at the forefront. Finally, the naming of themes was a process which took some time and reflection, particularly considering how best to capture the meaning behind the theme without merely describing it (Byrne, 2022).

Phase 6: Producing the report

Approaches for data write up were considered in several forms. As per the guidance, a decision was made to write up the themes in a descriptive manner within the results section, with further analysis and interpretation using available literature in the discussion. The themes were also written up as a form of narrative which guides the clinician through the experience women described, from their initial experiences with clinicians, to how this contributed to feelings of autonomy and vulnerability, leading to experiences of pain and distress, the immediate psychosocial impact following this, and finally reflecting on the perceptions of services and the gender roles that underlie and remain following these experiences (Byrne, 2022).

3.9 Quality, validity and self-reflexivity

3.9.1 Quality and validity measures

The assessment of quality and validity is integral to research practice and has often been a critique of qualitative research (Leung, 2015). Validity was assessed through measures such as using a pilot interview with the EbE consultant and testing to see if the questions were sufficient in addressing the study aims (Van Teijlingen & Hundley, 2002). Alongside this, efforts were made to recruit on multiple platforms to aim to recruit a sample which could be representative in order for the findings to be generalisable (Lewis et al., 2003). Further details using a quality appraisal tool are discussed in section 5.4.

The critical realist epistemology was also considered throughout decision making processes in the study which led to using reflexive thematic analysis and deciding not to use inter-rater reliability measures and member-checking. Second coders and codebooks were not used as these relate to other approaches to TA. Concepts such as inter-rater reliability would counteract the positionality that reflexive TA holds, with the analysis being a reflection of the researcher's engagement with the data and their reflexivity throughout the process. This therefore demonstrates the belief that no two researchers would or should code the data in the same way (Byrne, 2022). Alongside this, remaining consistent with the SLR methodology, inter-rater reliability was seen as more positivist and therefore less in alignment with a critical realist position (Alderson, 2021; McDonald et al., 2019; O'Connor & Joffe, 2020). The decision not to use member-checking was decided on the basis of this research being a process whereby it is constructed using an epistemology and beliefs which undoubtably shape and construct the research in a particular way (Clarke & Braun, 2021). Therefore, while the use of member-checking can be an insightful and necessary process, the limitations were also considered as evidence suggests they add little to improving overall findings (Thomas, 2017). Therefore, it was decided that using member-checking could contradict the reflexive nature of the methodology and epistemological stance taken.

However, as feminist theory suggests, there is a need to pay attention to our own subjectivity during the research process (Murray & Chamberlain, 1999). Quality and validity measures were instead considered through formal and informal meetings with supervisors, consultants, EbEs, specialist methodology groups as well as using tools such as reflective diaries (Johnson, 2009). This included sharing initial codes and themes in reflexive meetings with the different members involved in the study, with an aim for this to be a process in reflecting on how and why certain codes were made and the context around this.

3.9.2 Reflexivity throughout the project

Alongside stated intentions details in section 1.3, bracketing and the practice of reflexivity were used throughout the research which linked well with the methodology and recommendations for reflexive practice (Byrne, 2022; Clarke & Braun, 2021). During the early stages of the interviews, I looked at how the research team were shaping my experience and perception of the events. It made me question if I was adding a further lens or if this could invalidate patients' experiences. It also made me consider my role as the researcher, rather than the psychologist. This made me reflect on the need for boundaries as these were participants, not patients (Thompson & Russo, 2012). In practice however, I found myself empathising with my participants and taking care to acknowledge their distress and pain, which upon reflection felt appropriate given the topic of discussion. It led me to consider the role of the researcher when discussing difficult or traumatic events with participants and what stylistic approaches worked best and felt containing for participants (Pezalla et al., 2012).

I considered how I may influence participants to only talk about negative experiences or to over-emphasise these negative experiences in a way that could feel conflated or less of an objective representation of the event. I voiced these concerns in supervision meetings and specialist methods groups, and I realised part of my concern was providing a justification for why I was researching specifically negative experiences, rather than experiences in general. This reminded me of the literature I had already collated on the topic which looked at experiences as a whole and did not focus on in depth accounts of negative experiences which were having an impact on women (Daniele et al., 2017). I continued to reflect on my understanding of why these procedures can be so distressing and I found my assumptions to be challenged when consultants shared their expertise in practice or I gained new information (for example, pain relief). For instance, I considered my own assumptions about what I may have considered to be a perceived reluctance for clinicians or services to provide pain relief during IUD procedures. This was challenged through conversations with

consultants, discussing evidence which showed the difficulty in providing cervical block injections and the limited and contradicting evidence in the effectiveness of pain relief (Mittal & Goyal, 2015; Mody et al., 2012; Tangsiriwatthana et al., 2013). Throughout this process, I monitored how my assumptions had changed and at times were mirrored through different assumptions participants held which allowed me to capture their particular context and how our understanding can have some influence on our experiences. See appendix B for further details of reflexive practice in meetings extracts.

3.9.3 Insider/ outsider perspective

I started the journey reflecting on my own positionality as a woman, as someone who has once used the coil and the reasoning my research interests had led me to form this project (Hill & Dao, 2021). As I was beginning to seek ethical approval, while writing the distress protocol, I considered that I had focused mostly on the participant's wellbeing and not adequately factored in my own. This made me consider the literature and my position as while I had both an insider/outsider perspective, I began to realise the importance of considering this and the risk of this impacting me during the research and skewing the interpretations (Sherry, 2013; Tufford & Newman, 2012). I reflected on this further when beginning to write the topic guide and met with my supervisor and the EbE to co-construct this process (Louise & Annette, 2019). This led to further reflection on what questions I thought were more/less probing and how I felt about asking participants to discuss their distress in detail. This process became critical as I interviewed each participant, as at each point I considered if I was probing participants enough. If I felt I wasn't probing enough in certain parts of the interview, I would pause to consider if this was my assessment of their willingness or ability to share this information or my own avoidance in tolerating this distress and how I related to it. Alongside this, I reflected on my own assumptions of what I felt a distressing procedure was at the beginning of this research and how this changed

throughout the interview process (Sherry, 2013). See appendix A for further details in reflective diary extracts.

4. Results

4.1 Summary of themes

This section presents the finalised results, including a description of all themes and subthemes. Table 7 shows a summary of all themes.

Table 7- Summary of all themes

Overarching theme 1 Clinician interpersonal skills	Subtheme 1- "there was no trying to build a rapportnothing to make me sort of feel comfortable": relationship to clinician	Subtheme 2 – "I think just acknowledgment would have been more helpful.": a clinician's validation	Subtheme 3 – "It felt like I was on the list of things to do that day": personalised care in a clinical environment
Overarching theme 2	Subtheme 1 –	Subtheme 2 –	Subtheme 3 –
Autonomy and vulnerability	"Maybe I should have just gone "stop". But you see you're definitely not	"This is just a very vulnerable thing, you feel very vulnerable":	"I can't relax because I don't really know what you're doing":

managing distress

in control...there

alternative": feelings of

wasn't an

control and informed choice communication

during the procedure

Overarching theme 3 Pain experiences and pain management	Subtheme 1 – "I just know of so many like horror stories": pre-procedure information and anticipation of pain	Subtheme 2 – "It was quite painful and I was told it was gonna be uncomfortable": clinicians underestimating pain experiences	Subtheme 3 – "It was so painful. I think I almost fainted. I was very close to throwing up": pain experiences	Subtheme 4 – "being through all the pain and how invasive it is and just being told, take some paracetamol": pain management
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Overarching theme 4 Psychosocial impact	Subtheme 1 – "Once I left the clinic I burst into tears and I called my friend": network support and mental health	Subtheme 2 – "I absolutely could not go back to get another coil because the thought of doing that all over again is awful": relationship to the coil and gynaecological procedures	Subtheme 3- "Right after he finished, he went back to his surgery and sat at his desk": post procedure aftercare
Overarching theme 5 Perceptions of clinicians and services	Subtheme 1 – "I do think people should specialise in it morethey need to be well versed in it": perceived clinician competence	Subtheme 2 – "I won't go back there now": lack of trust in system and professionals	Subtheme 3 – "I utterly feel, I utterly feel for people that have to learn": empathy for clinicians
Overarching theme 6 Gender roles and empowerment	Subtheme 1 – "You'll get on with it, all women do": women have high pain thresholds	Subtheme 2 – "I remember at the time for some reason feeling like it was my fault": shame experiences	Subtheme 3 – "I've really learnt to stand my ground with it": self-advocacy and empowerment

4.2 Overarching theme 1: Clinician interpersonal skills

This theme focuses on clinician characteristics as perceived by the participants.

Participants described key points such as relationship factors, whether they felt their clinician validated their concerns and the environment created by the clinician.

Subtheme 1 – "there was no trying to build a rapport...nothing to make me sort of feel comfortable": relationship to clinician

Participants described the importance they placed on existing relationships they had with clinicians as well as gaining a rapport with a new clinician. There was an increased significance placed on the relationship with the clinician doing the insertion, but it also helped if this was established with any of the assisting staff members.

In most examples participants described how having a relationship or a lack of one, played a large part in changing how distressing or painful the experience was for them.

"Had he been warm and empathetic, I would have dealt with the whole thing a lot better and I know that sounds...in the scheme of things...I should be saying things like, you know, the pain was the worst. I could have dealt with the pain if I've been supported through it properly...if I'd felt that he cared about what he was doing to me and I didn't feel he did" — Florence

One participant described feeling that the established relationship she held with the clinician helped them to repair, and reduced the distress of what became a perforation which had lasting physical consequences.

"I don't hold no kind of bad judgment towards her...it felt nice that she was that apologetic. I think if she'd had not been very nice when she fitted it, and I've not spoken to us since, I probably would feel a lot more traumatised and upset about the fitting" – Lydia

Participants described how having an established relationship with a clinician made them feel the clinician understood their pain thresholds which made them feel reassured throughout the procedure.

"I think we had the rapport and the trust that she knew I would tell her if I couldn't cope with it anymore."- Frances

Subtheme 2 – "I think just acknowledgment would have been more helpful.": a clinician's validation

In this subtheme participants spoke of clinicians acknowledging their experiences, acting appropriately, and being validated when they expressed their concerns.

Many participants reported feeling a need for clinicians to acknowledge when they had experienced a difficult or distressing procedure. One participant spoke of finding the procedure more distressing because of a lack of acknowledgement of what turned out to be a coil fitting which she later found out she was anatomically unsuitable for.

"...the worst part is after it happened, no one apologized like it was just this horrible thing that happened to me. And no one acknowledged it. No one apologized. It was just like I was, you know, that was it. There was no communication whatsoever" - Alice

Participants spoke of a need for validation when an experience has been difficult.

One participant described her removal experience with a new clinician as being more caring due to the sensitivity and validation the clinician showed her. It also reduced some of the distress she had experienced following a prior procedure performed by a different clinician which had led her to question if she had exaggerated how distressing the experience was.

"when I told her about my experience of getting it in and she said I would never treat my patients like that. I can't believe you've been spoken to in that way, I'm so sorry you went through that and it really it validated how I'd felt because for so long, I thought I'd overreacted." – Esther

Subtheme 3- "It felt like I was on the list of things to do that day": personalised care in a clinical environment

In this subtheme participants described feeling a discrepancy between how they experienced the procedure compared to how they felt the clinicians may have perceived it. They spoke of the procedure feeling manualised, which they understood made sense for the clinicians, who may view them as more routine compared to the experience of being a patient. They spoke of the importance of their clinician creating an environment that felt more compassionate and viewed them as a person rather than just a patient. Participants also spoke of a desire for personalised care by taking into account their history when considering suitability for the coil.

Several participants described feeling their clinician was detached from them and only focused on succeeding in whichever procedure they were involved with. One participant described a prolonged removal with several clinicians quickly becoming involved in what she described as a learning opportunity that occurred without her explicit consent.

"It made me also feel a little bit like a specimen on display like come and look at this. Come and look at this...you weren't seeing me as a human or a person, you were seeing me as a body to retrieve an object out of" – Sophia

Some participants reported on how they felt clinical environments can evoke different feelings in people and the clinician's role in creating a sense of safety within this context.

"they're still very clinical, very medical, whereas this is something that needs I think, a bit more comfort around it...It's just all very clinical, which also a lot of people have a lot of connotations around" – Teresa

Many participants considered how procedures may be normalised for clinicians and the feelings involved can get lost in the process.

"That was the feel of the whole appointment. Let's just get on with it. Get it done and off you go...! suppose part of that is that for them...it's an everyday procedure. I don't know how many they do a day they could do 10 or 20 for all I know you're in, you're out... we're just numbers ...it did feel very much like production line" - Florence

Participants also felt that their patient history or suitability for the coil was not discussed explicitly, which they felt had led to them having the coil at a time that exacerbated existing difficulties. One patient described struggling with mental health difficulties after her pregnancy which she felt were not adequately considered when her clinician suggested she should try the coil.

"I was actually very severe post-natally depressed too [and] was going through post natal depression at the time and I had the mirena put in then and at that time". – Barbara

4.3 Overarching theme 2 – Autonomy and vulnerability

In this theme participants described feelings of control and how they impacted on pain and distress felt during coil procedures, particularly in cases of higher vulnerability.

Participants also placed focus on the idea of autonomy through informed choice and experiences of clinician communication during the procedure, also linking in with ideas of vulnerability.

Subtheme 1 – "Maybe I should have just gone "stop". But you see you're definitely not in control...there wasn't an alternative": feeling of control and informed choice In this subtheme participants described the importance of informed choice when deciding on

the coil and how this links to feelings of power and control both in decision making and in coil procedures. Feelings of control during the procedure were described as paramount in understanding that the procedure could be paused or abandoned. Participants went on to describe how this created a sense of distress if they felt their own autonomy was restricted.

Participants described a variety of factors that they felt were missing in helping them to feel fully informed about the coil and what the procedure entailed. One participant described an experience where the issue of consent was glossed over in a way that made her feel pushed to make the decision.

"they kind of paused and looked at me, and I must admit. And I think this is significant, which is why I'm dwelling on it a little bit, he said, well, do you consent or not?" – Florence

Participants described procedures where they struggled to recall being made aware of being able to stop the procedure at any time, so they felt they had limited choices once it had begun.

"I don't ever think that they were like we can stop at any time...like if you ever feel uncomfortable" – Jessie

Participants also spoke about the difficulty in feeling like you have full control as they often found it was difficult to initiate discontinuing the procedure once it had already started. They also spoke of feeling like there were limited options for them if they asked to discontinue the procedure, if having a coil fitted or removed was their only option.

"it felt like one of those things where it's like I had...you had no choice. I couldn't say stop because I needed it to come out. It was very... I felt very helpless. I felt like I, you know, I don't have any options here. I just need to leave. I need to let them stay digging around in there and hope that they get it out like but yeah, I remember when leaving I had to get the bus home and I just felt, I felt really violated" – Sophia

Subtheme 2 – "This is just a very vulnerable thing, you feel very vulnerable": managing distress and trauma

In this subtheme participants discussed factors such as vulnerability and past trauma which made their experiences particularly distressing. They described a need for trauma informed care to be at the forefront of procedures.

Participants discussed feelings of vulnerability throughout the procedure and how this created more of a power imbalance with the clinician. One participant described a clinician giving her difficult news about her anatomy during her coil procedure which she found distressing and affected her for several weeks afterwards.

"like on the bed with my legs open and her still, you know, in the middle of completing things and removing equipment. So it wasn't like when I was dressed and in a kind of equal footing with her and having an adult to adult conversation, it was kind of when I was still in quite a vulnerable position, and I thought that was odd, not how I would give it to that message if I was in that job and felt that I needed to." - Nina

Many participants described the procedure as being traumatic for them. Some described feeling there was a discrepancy between how distressed they felt and how their clinician may have interpreted the situation.

"I didn't need them to, like, stroke my hair or anything or, you know, like hold my hand. But at the same time, it was like the...way that they were, it just did not match up to how traumatic the insertion procedure was...I felt a little misguided because they felt quite nonchalant about it" - Agnes Many participants placed importance on clinicians practising in a trauma informed way. One participant spoke of how her previous early life trauma was triggered again by her coil procedure due to the vulnerability and lack of control she felt she had in the appointment, which she described had taken her by surprise.

"I think it was the unexpected side and the really traumatic bit of it for me was the after it affects is that so...She said to me I needed to check that the tapes were in the right place...there was no way I could do that for two or three weeks. I couldn't bear the thought of anything touching me down there at all...I just I felt like I felt like I was right back where I had been years and years ago... I felt like I'd been violated...not the way she treated me, the way she went through things was absolutely brilliant. But I guess it took me back to that place in my head where... I didn't feel I had control over my own body for a long time" — Frances

Subtheme 3 - "I can't relax because I don't really know what you're doing": communication during the procedure

In this theme participants discussed mixed accounts of clinicians talking through the procedure or experiences where this was lacking. They described feeling reassured with the clinician communicating with them throughout the procedure and feeling more prepared for what to expect at each stage.

Some participants described feeling more distressed and in pain when their clinician either didn't communicate to them throughout or stopped when the procedure was becoming more difficult. Many participants described these feelings as contributing to a general sense of distress that often lasted after the procedure was complete.

"So he didn't really give me any information, so that was one of the things as well that was like ohh God, I don't know how much more of this I can take. And yes, I had no kind of idea of what was going wrong. Why it was taking so long? How much longer it was going to take?

If I'd had a kind of clearer idea, then I might have been more kind of able to manage the pain levels" – Inez

Some participants described how their clinician communicating with them throughout the procedure led to a lower distress or trauma than that felt at previous insertions, as they were aware of what to expect and understood the physical sensations they were experiencing.

"She was kind of telling me exactly what she was doing, where she was up to and she let me know before she used the dilator, she talked me through every single step of it, so none of the none of the kind of uncomfortable or trauma element of it came from the way she was.

She was absolutely incredible all the way through" – Frances

Some participants described mixed feelings involved in difficult removal procedures, feeling glad it was successful but confused and distressed as they were not aware of what was going on.

"There was no moment of her saying I'm going to take it out now, you know, brace yourself.

It...just all happened. In one go. And she was thoroughly triumphant. I mean, as she should

be, that after all of this time that she got it out and I was quite triumphant too, but also at the

same time it was just, it was just awful, yeah... I mean I didn't know it had happened... I just

thought that it had been a particularly bad go with the thing and it...ohh it was just the shock

of it. And I just, you know, felt my whole body kind of go and also because I didn't realize that

it had come out. I was sort of, I was still in the bracing myself for the next bit" - Isa

4.4 Overarching theme 3 – Pain experiences and pain management

In this theme, participants described their pain experiences from prior to the procedure to post procedure. Participants describe the type of pain they experienced and how it

matched up to what they were anticipating. They also described their experiences of clinician's perspectives as well as beliefs and experiences regarding pain management.

Subtheme 1 - "I just know of so many like horror stories": pre-procedure information and anticipation of pain

In this subtheme participants described a variety of factors that influenced how they felt in the lead up to the procedure that affected their experience as a whole. Participants spoke of family and friend experiences playing a part in influencing their own expectations of the experience.

Many women described being influenced by conversations around the coil at the time. One participant described how some examples in media and popular culture played a part in their anticipation of the procedure being painful.

"I've had it done after the point where a lot of kind of women have come out and said about how painful they found it. And you know, people like Naga Munchetty and all those kind of influential women have come out and said actually this is what our experience was. So I kind of was going into it knowing that it might be painful and uncomfortable" – Frances

Participants described feeling anticipatory anxiety about potential pain and risks involved. One participant explained how there was a lack of place to discuss this prior to her appointment which led her to speak to her family and friends, trying to elicit some reassurance and understanding of the level of pain involved.

"I was definitely worried about it, and anxious about it, and I think that was part of the reason why I was speaking to so many people, about it, because I was like, I kind of want to understand what's happening...I was worried that it was going to hurt, like I was worried about how much it was going to hurt" – Mabel

Many participants described speaking to friends about the coil and who reported mixed experiences. Participants took this on board and it influenced their view of how the procedure may go for them, at times remembering the more negative experiences.

"...couple of friends of mine had the same they've had the coil before and they just they had problems straight away but then I know other people who've had the coil and haven't had any problems. So I had that in the back of my mind, some people were in pain after they had it inserted and had to have it removed". — Irene

Subtheme 2 – "It was quite painful and I was told it was gonna be uncomfortable": clinicians underestimating pain experiences

In this subtheme participants reported clinicians as describing the procedure in a way they felt often underplayed their experiences of pain and distress.

Participants reported that their clinicians did not effectively communicate what the procedure entailed both during and after, resulting in what felt like an underestimation of their experience as a whole.

"And why has the pain and everything associated with this procedure and the weeks following have been so downplayed" – Agnes

Many participants reported clinicians using terminology that they felt did not appropriately describe the pain they experienced.

"You're gonna feel a pinch, like quite downplayed statements, which were not what I felt and I literally screamed when I had it inserted like my mum was in the other room and she was like, came to the door to ask if everything was OK...it was quite blase" – Sophia

One participant that worked in healthcare described feeling that there can be an avoidance of communicating aspects of the procedure being painful or discussing perceptions of pain more generally.

"I again acknowledge this, it's a health professional thing... don't always acknowledge the sort of spectrum of pain, and we don't use the word pain as often as, I think, we probably should" – Clara

Subtheme 3 – "It was so painful. I think I almost fainted. I was very close to throwing up": pain experiences

In this subtheme participants discussed pain experiences both during and after the procedure. They spoke of the pain experience being a new sensation that was difficult to compare to any other experiences and a sense of feeling unprepared for the pain alongside describing experiences that felt like symptoms of shock.

Some participants described symptoms of shock which took them a long time to recover from, either needing to stay in the room or having to make adjustments in order to be able to get home safely.

"I felt pretty sick actually. Um, I think I was a bit in shock...having your cervix clamped does do that to you. So I don't know that my heart rate dropped particularly, but I think that I probably did a bit actually and I came up feeling quite sick, quite lightheaded" – Selina

Some participants described their own ways of coping with the extreme pain experienced and the concern this elicited in the clinicians.

"I think they were so worried about me because I went really quiet because I was in so much pain" – Irene

Participants described the type of pain they experienced as being new and unfamiliar which added to the distress they were experiencing.

"she got a cervical clamp out, I think she said a metal one, and managed eventually to just get it in but it was just unbelievably painful. I just, I don't think I've ever experienced pain like it, to be honest...I mean, it was horrific" - Matilda

Subtheme 4 – "being through all the pain and how invasive it is and just being told, take some paracetamol": pain management

In this subtheme participants described their beliefs about and experiences of pain relief both during and after the procedure. The majority of participants reported pain relief options either weren't discussed or were dismissed if they asked their clinicians for pain relief options during the procedure. When pain relief was discussed, the majority of participants described being recommended over the counter pain medication before and after which participants did not feel was adequate for the severity of pain they experienced.

Many participants described a sense of surprise that pain relief was not routinely offered for coil procedures.

"I think like definitely the pain relief option, I think it's, like I do not understand how a procedure like that doesn't warrant proper pain relief or anaesthesia" – Mabel

One participant described an example where she was offered an anaesthetic spray but she also felt this was inadequate for the overall pain of the procedure and some of the pain that can be experienced afterwards.

"I think the pain relief is a big one. I know that everybody does experience it differently, but I do think that is distinct lack of actual pain relief ...when you're just having this procedure of insertion, it's incredibly painful and anaesthetic spray or an anaesthetic gel isn't enough. It might take away the initial sharpness of it going in, but you know you're then left with all these pains for days and they are more severe than normal just period cramping, which I do also think doesn't have enough pain relief if around it. But yeah, I'd say pain relief and understanding that people are in pain and it's not just 'one of those things'."- Teresa

4.5 Overarching theme 4 – Psychosocial impact

In this theme participants described the psychosocial impact of the experience they had, immediately after the procedure as well as for some time afterwards. Most participants described reaching out to various support networks after the procedure and many participants described the importance of care post-procedure. Participants also reported feeling a need for aftercare and how the experience affected their beliefs about the coil.

Subtheme 1 – "Once I left the clinic I burst into tears and I called my friend": immediate support and mental health

In this theme participants described the support they reached out for immediately after the procedure and their mental health in the subsequent weeks and months post procedure.

Many participants reported breaking down immediately after the appointment and seeking comfort from friends and family.

"It was pretty grim, I rang my mum and I cried down the phone. It was grim" - Isa

Many participants described the immediate sense of distress they felt after leaving their appointment and finding it difficult to relax from this heightened state.

"It was a really horrible experience. I came out. I had a panic attack when I came out of there and I couldn't settle the whole time. I think I spent a good three hours just in a state." –

Esther

Participants described the lasting effects they felt the experience had left them with.

One participant described how she often thinks about her appointment and has re-lived the experience which caused her so much distress.

"It's affected my life in every single way, so every day I relive what happened and I think about it. So I think about that appointment every day at some point during the day"— Florence

Subtheme 2 – "I absolutely could not go back to get another coil because the thought of doing that all over again is awful": relationship to the coil and gynaecological procedures

In this subtheme participants discussed how their relationship to the coil and other procedures has changed since their experience. Some participants described being reluctant to use the coil again while others described the overall effect it had on their perceptions of other gynaecological procedures.

Some participants described feeling a sense of conflict as they had found the coil to be effective in what they were looking for but were re-considering due to their procedure experience.

"It's putting me off in the future having a coil again when I found the actual experience of once it was in, really good" – Inez

Many participants reported that the experience had created anxiety around other gynaecological procedures as well as childbirth. One participant described how she had developed a heightened sense of worry about procedures that she felt quite at ease with prior to her coil experience.

"I was definitely more tense for the cervical smear, though I was definitely like, yeah, same speculum, same experience. I think it's made me....if I were to fall pregnant it's made me quite fearful of childbirth... And yeah, I used to be quite relaxed with cervical smears and I don't like that I'm not" – Sophia

One participant discussed how she had considered her circumstances as a way of attempting to avoid having another coil procedure.

"I would think very carefully about having it done. Probably my age means I might get away with never having it done and I can just have it for five or six years and then that's it. And but yeah, I wouldn't repeat that. I would not want to risk repeating that experience"- Beverley Subtheme 3 –"Right after he finished, he went back to his surgery and sat at his desk": post procedure aftercare

In this subtheme participants reported not experiencing the after-care they expected after such an invasive procedure. They reported when post-procedure consultations did occur, they were very short, often consisting of being given a leaflet to do with the coil.

Participants reported a difficulty in managing symptoms they were still experiencing at the end of the procedure, feeling as if not enough care was given, or consideration that they may need more time for their body to regulate itself.

"[I had that] sweat sensation going through your body. And then I was told to put my trousers back on, and that was the end of my appointment. They gave me some condoms and sent me home." – Sophia

Participants described a need for a consultation to help them process the experience of the procedure, explaining they felt the allotted time was not sufficient and felt rushed.

"my appointment was booked in for like 20 minutes, you know, and it was like, it felt rushed.

And it would have been better to sort of like have a bit more time to talk about it, process it...having that decompression time afterwards, making sure that like everyone was like fully informed about, you know, risks, what was normal to feel afterwards, how to like look after yourself.- Mabel

Some participants also expressed concerns around a lack of follow-up appointments as part of post-procedure aftercare. One participant described struggling to understand the different sensations she was feeling and would have appreciated some guidance in the form of a routine follow-up check.

"I think follow-ups because you get it done and...you're just completely on your own and you know, as somebody who hasn't had children and I don't have any understanding of what, what things feel like inside my cervix... there was no sort of follow up after care, which was, oh, if you feel something wrong then come and speak to us"- Teresa

4.6 Overarching theme 5 – Perceptions of clinicians and services

In this theme participants described their views of clinicians and for some, how these changed over the course of their procedures. Despite these views, the majority of participants took time to express their empathy for clinician's positions and the pressures

they were facing to deliver adequate care to them as patients. Participants also described feeling that their experiences had made them more mistrusting of services as a whole.

Subtheme 1 – "I do think people should specialise in it more...they need to be well versed in it": perceived clinician competence

Participants described situations where they questioned their clinicians competence based on their experience with the coil. Some participants described feeling more comfortable if their clinician communicated their expertise to them as this made them feel reassured that they were in safe hands. Most participants reported being unclear about the training or competence required to administer coil procedures.

In cases when the coil insertion was unsuccessful, participants described feeling that this was likely due to the clinician's lack of experience.

"she did say, I've had the training ...it was probably [2 years ago]....but I definitely know she hadn't, I definitely knew by the end of it, afterwards...that she hadn't done that many" – Clara Some participants described feeling a sense of uncertainty when being counselled by a clinician who they perceived as being less competent than they had expected. They reported attempting to understand if there was a system of continual assessment of clinician skill in coil procedures, and validation as fit to practice, with questions raised about whether poor practice would get flagged.

"[I] just don't think she was very good at it. I don't know what the training is. I think you probably I suspect you do your training and then you're out and unsupervised for the rest of your practicing career. I mean, why would you check that someone is OK at inserting a coil if they've done, you know, 50 in the last year and you haven't had any issues flagged? ... she got it in eventually, it was a successful procedure, it just wasn't a very good one" – Beverley

Subtheme 2 – "I won't go back there now": lack of trust in system and professionals

In this subtheme participants described experiencing a breakdown of trust following clinician advice and the overall care they received. They spoke of feeling let down by services and the wider health system in how they felt they publicised the coil.

One participant described feeling that she had been let down by several services throughout different points of care during their experience of the coil which placed her in medical danger.

"I feel frustrated, especially by the [person] doing the ultrasound scan. When I asked [them] to specifically to look and I felt [they didn't do it properly and I know now [they] didn't do it properly because that could have been caught earlier on and maybe the damage would have been less severe and it would have been an easier operation to get it out... I'd say there was some negligence, like some failings with them not picking it up. Definitely at different instances" - Lydia

Other participants felt the way the coil was described on official guidance was misleading and this had impacted their trust in the NHS was as a result.

"The only thing it has impacted on this is perhaps my trust in the system a little bit. And if an NHS website is saying, it may be uncomfortable - I don't believe that at all anymore". — Agnes

Participants felt their belief in their doctors had been damaged due to repeated experiences of being invalidated and ignored when describing their embodied experiences.

"Like I know so many people who just like, no one has any trust in what the doctors say anymore because their own first-hand experience just completely discounts the advice you receive" – Adela

Subtheme 3 – "I utterly feel, I utterly feel for people that have to learn": empathy for clinicians

In this theme most participants described feeling a sense of empathy and understanding for their clinicians and the position they are in.

Many participants understood the pressure clinicians were under in delivering care under difficult circumstances.

"felt like a similar kind of story of really nice doctors doing their best in a situation that was just really not ideal" – Isa

Participants also considered that during their experiences of distressing procedures, their clinicians would have found this distressing too and worried about the impact on them. "I felt sorry for the doctor because I'd asked her to do it and I appreciated her doing it but at the same time it was really, really unpleasant"- Matilda

4.7 Overarching theme 6 – Gender roles and empowerment

In this theme participants described taking positions which could be seen as constructed roles that women can take in society (Murray & Chamberlain, 1999). Participants described themselves as persevering despite experiencing pain and distress, explaining they needed to justify they had high pain thresholds. Despite this, participants described a sense of empowerment equipping themselves with knowledge to advocate for themselves.

Subtheme 1 - "You'll get on with it, all women do": women have high pain thresholds

In this subtheme women described feeling as if there is a societal expectation for them to endure and experience pain. They described feeling as if their clinicians also upheld these positions and this led them to feeling a need to persevere, and in some cases hide the pain and distress they were experiencing.

All participants spoke of feelings spectrums of moderate to severe levels of pain.

Alongside their descriptions of this, this was often accompanied with a disclaimer around having high pain thresholds which felt like they needed to justify or had become accustomed to doing so, for fear that people may not believe them or understand the levels of pain they had experienced.

"it's just the levels of pain was just ...and I'm not a I'm not a wimp. I actually can have got high level high levels of tolerance. You know I actually gave birth without any drugs" – Irene Participants described persevering through pain and attempting to hide the severity of pain they were in from their clinician. They described how they perceived that their clinicians could sense this but continued, with an overall assumption being placed on the patient to tell them if they couldn't tolerate the procedure any longer.

"She kept checking in around pain levels and I was not entirely honest with her, so I was telling her it was and I think she knew. I think she knew I wasn't being entirely honest. So when she was like in pain levels, I was telling and I was at a 6 when I was probably about an 8 or 9. At some point it was incredibly painful and I think she knew that because I was, I was kind of gripping the edge of the bed" – Frances

Participants described feeling as if they are expected to cope with pain by virtue of being a woman which they felt was indicative of the approach of women's health in the UK. "It's just women's health and we're just told, like time after time the pain is normal and we just have to deal with it...this never happened to men." – Alice

Subtheme 2 - "I remember at the time for some reason feeling like it was my fault": shame experiences

In this theme participants described feelings of embarrassment and shame when they had responded to finding their procedures distressing.

One participant described being in severe pain following her coil procedure and as a result having an emotional reaction to her symptoms. She reported finding this difficult as it was out of character for her and felt a sense of shame for reacting in this way.

"It was quite embarrassing actually. I cried in front of quite a lot of my colleagues like I don't cry at work. Yeah, I'm not that kind of person. So for me to be like in that much of a state was a bit embarrassing." – Agnes

Participants described finding it difficult if they experienced adverse reactions and had to be assisted after the procedure. One participant spoke of being in severe pain and not being able to leave the surgery while feeling a sense of shame for how her body was reacting.

"I kept apologizing, I was like, I'm so sorry, I don't know what's going on, I just can't stand up like I can't walk" – Alice

Subtheme 3 – "I've really learnt to stand my ground with it": self-advocacy and empowerment

This theme describes participants taking power into their own hands by doing their own research and becoming more assertive to advocate for their own needs. Participants described doing their own research and feeling empowered when discussing future procedures or how they wanted to proceed with their coil. One participant described feeling like her clinician took her more seriously after she had been assertive and completed her own research.

"I had done a lot of reading afterwards subsequently...I was then a bit more affirmative with my GP to say this is what I want, and even then it was well, you know, you didn't really give it a go the second time long enough and I said, well, no, I don't want it, this categorically I don't want it"- Barbara

Participants described how some of their experiences had changed how agreeable they present themselves as. One participant explained how she feels she stands up for her needs in a way she struggled to do before.

"It changed who I was massively as a person, I used to be...very yes I'll do that no, it's not a problem, it's fine...now I'm like, no, you can't tell me to do that because I'm not going to. It's made me stand up for myself more, but not in the nicest way."— Esther

5. Discussion

5.1 Overview

This section begins with a summary of the findings, followed by detailed descriptions of each theme and how this corresponds to relevant literature and theory. This is followed by a quality appraisal of the literature and the clinical implications for the findings.

5.2 Summary of results and relevant literature

5.2.1 Theme 1 – Clinician interpersonal skills

In this theme participants focused on the interpersonal skills they appreciated in clinicians which they felt made them feel more at ease and reduced the distress of the procedure. The results demonstrated how women felt the relationship they had with their clinicians impacted on the level of pain or distress they felt during the procedure. If patients are properly counselled and are helped to feel at ease with their clinicians, this should play a part in minimising the level of pain experienced. Evidence shows that setting up an environment to help the patient relax prior to the procedure, alongside confidence of the clinician, can influence a woman's perception of pain and their experience of the procedure (Bahamondes et al., 2014).

The second subtheme addressed validation and described a need for clinicians to acknowledge concerns or difficult experiences. This links to research which suggests negative and invalidating experiences with clinicians regarding their care can result in substantial distress and lasting effects (Caddy et al. 2022). This also ties to research which looked at removal experiences being distressing to women because they felt clinicians minimised and ignored their concerns, often leading to resistance in the removal women requested (Amico et al. 2016).

The last subtheme also spoke to the idea of a need for personalised care, with women describing the clinical nature of the procedure and clinicians' detached manner as inappropriate for the sensitivity of the procedure. Research into women's experiences of gynaecological procedures ties to this as it found perceived unsympathetic attitudes from clinicians, alongside other factors, contributed to feelings of psychological trauma (Menage, 1996). Further to this, the results demonstrated that at times women felt like a 'specimen on display', describing aspects of practice such as involving other clinicians that they didn't fully consent to, all of which left them feeling dehumanised. This links to evidence that women have experienced care in aligned settings, such as obstetrics, that has left them feeling dehumanised due to involvement of other staff and lack of consent for this (Keedle et al., 2022). This suggests a strong argument for providing personalised care, where research has found that when this is achieved, it can lead to more appropriate method choice and higher satisfaction rates (Bitzer et al., 2021).

When considering why clinicians may behave in ways that could be perceived as detached, there may be a number of explanations to consider. Some research can show how doctors may behave in more detached ways when under pressure or experiencing stress (Halpern, 2001), particularly if a procedure is more complex. This could also point to a lack of training, particularly in gaining interpersonal skills and understanding their importance alongside knowledge of the procedure (Ribeiro et al., 2021). The wider context of service pressures may also understandably create a pressured environment where they feel they have to see as many patients as possible, within fewer and shorter appointments (Bourne et al., 2019; Montgomery et al., 2017).

5.2.2 Theme 2 – Autonomy and vulnerability

In this theme participants described their experiences of a lack of autonomy and a sense of heightened vulnerability during procedures. Participants described the importance of feeling in control of the procedure and their sense of control was also influenced the level

of distress they felt. This links to research which places importance on the aspect of control in IUD procedures (Gomez et al. 2018) as well as research which suggests increased feelings of control and autonomy can lead to a reduction in psychological distress (Donovan et al., 2005; Glover et al., 2002) This points to a need to consider trauma informed care in these procedures, understanding that it places patients in very vulnerable positions (Poleshuck & Woods, 2014).

In reference to the second subtheme looking at vulnerability, participants described themselves being in vulnerable situations and attempting to manage the distress this caused. This links to research that found women experience feelings of loss of dignity, embarrassment and anxiety during pelvic and gynaecological examinations (Yanikkerem et al., 2009). These examples demonstrate the sensitive nature of gynaecological procedure and the need to treat them as such. It is also important to consider patients that may also need extra care during these examinations as the literature suggests women with previous experiences of trauma are 12% more likely to experience difficulties during examination (Huber et al., 2009). Clinicians must take this into account as literature suggests difficulty or anxiety concerning these procedures can lead to patients avoiding them entirely (O'Laughlin et al. 2021; Huber et al., 2009).

The third subtheme looked at the importance of communication during the procedure. This links to research which found communication and being told what was going on helped to reduce pain experiences in women having hysteroscopies (Morgan et al., 2004). This also links to the other subthemes as it is particularly important to consider communication and trauma informed care when patients are in vulnerable positions (Brooks et al., 2018). It is important to consider the power dynamics in the consulting room as the act of information provision is key when patients are in a vulnerable position (Cook & Brunton, 2015). The need for continued communication could be argued as vital in ensuring informed consent throughout the procedure, which links to the previously discussed perceptions of control and informed choice. It is also worth noting that most medical research looking at women's reluctance to take part in gynaecological examinations is focused on women's beliefs and

psychological states rather than clinicians' sensitivity and communication, especially considering historic injustices (Cook & Brunton, 2015).

5.2.3 Theme 3 – Pain experiences and pain management

The focus of this theme was participants describing their beliefs about pain prior to the procedure and how they changed after the procedure, alongside their experiences of pain and pain management. They also described experiences of clinicians underestimating their pain experiences.

The first subtheme looked at pre-procedure information and perceptions, with many participants describing experiences where they had heard negative experiences from friends, family and media sources. This links to research which found online social media platforms (YouTube and TikTok) shared more negative experiences of the IUD (Wu et al., 2023; Nguyen & Allen, 2018). Further to this, research has suggested that perception of the IUD is often influenced by knowing a peer who has had experience of using it (Callegari et al., 2013).

The second and third subthemes looked at women's pain experiences and clinicians underestimating these experiences. Participants described severe pain experiences ranging from being nauseous to experiencing shock symptoms, with clinicians described as underplaying pain experiences of the procedure. This is consistent with research in women's equity which can disregard women as "emotional" when they experience pain (Samulowitz et al., 2018). This also ties to research which has found that clinicians can underestimate their patient's pain levels (Akintomide et al. 2015). Further to this, within gynaecology and obstetrics, male clinicians were found to often underestimate female patient's pain experiences, with more discrepant ratings being found among senior clinicians (Miron-Schatz et al., 2020).

With regards to participants descriptions of pain, research into IUD insertions found 68% of women experienced nausea, vomiting or dizziness and fainting (Balderstone, 2022).

In addition, an RCT looking at insertion experiences found women experienced moderate pain, which was more likely to be exacerbated if they had higher levels of anxiety (Ribeiro et al. 2021). This ties to pain research which suggests experience of pain can be heightened if anxiety is higher (Woo, 2010) with previous research suggesting attention to said painful stimuli can exacerbate the experience of pain (Arntz et al. 1991).

The final subtheme discussed women's experiences and beliefs around pain management of the procedure. Participants described experiences where pain relief was not routinely offered and when it was discussed, it was often in the context of them taking over the counter pain relief before and after the procedure, which participants did not feel was adequate. This links to evidence which suggests NSAIDs were not found to be sufficient for pain relief during insertion however may be more helpful for post-procedure pain (Sandoval et al. 2022). However, while most literature focuses on the psychological factors involved in pain reduction (Ribeiro et al. 2021), it is important to still offer pain relief as an additional pain management strategy. While taking into account that evidence on pain relief effectiveness during IUD procedures is mixed (Mittal & Goyal, 2015; Tangsiriwatthana et al. 2013), taking any form of relief could be argued to produce some additional effect even if this is placebo (Kuehn, 2005). Overall, the strategy for pain management should encompass options for different pain relief at different stages, provision of psychological tools to reduce anxiety as well as providing women with as much choice and control throughout the counselling and procedure processes.

A final point to consider may be clinicians approaches to and attention to pain.

Literature suggests that in time pressured work environments doctors may use strategies such as avoidance of pain or patient suffering (Connelly, 2009). This may be due to experiences of dissonance or a way of coping with the acknowledgement that they have caused pain to a patient and consideration of how difficult this is when "do no harm" is a widely held statement in training (Marsh & Barclay, 2015). As previous research has suggested, doctors' training has been argued to involve processes of detaching from their patients, in order to protect themselves (Lief, 1963; Pruthi & Goel, 2014). However, the

absence of acknowledging situations when pain or distress has arisen can put patients at risk. An argument for a less depersonalised approach and more compassion would arguably also lead to better wellbeing for doctors themselves (Halpern, 2001; Pruthi & Goel, 2014).

5.2.4 Theme 4 – Psychosocial impact

In this theme participants discussed their experiences in the immediate aftermath of the procedure as well as their experiences of aftercare. In the first subtheme participants described their mental health experiences after their procedure, with many reaching out to family and friends for support. This support can be required if patients do not feel adequately cared for by their clinicians or if they have not had the time to debrief post-procedure. This links to literature which suggests women often communicate with female friends and family about contraception (Alderson et al., 2014) and experience reduced anxiety when they have this social support (Kimmel et al., 2014). This may show that women feel more comfortable being emotionally vulnerable with other women that they know and trust to be validating and caring.

In the second subtheme, participants described how their experience has affected their relationship with the coil and gynaecological procedures in general. This links to research which found that women who experience anxiety in relation to gynaecological appointments are more likely to avoid them (Cook & Brunton, 2015; O'Laughlin et al., 2021). Therefore, as the results suggested, women who have difficult experiences during their IUD procedure may be more likely to have difficulties in attending future gynaecological health appointments which could put them at risk. Smear tests could be seen as a type of regular appointment and as was demonstrated in the results, participants described their perceptions of them had changed for the worse since having their coil appointment. This is particularly key for a UK context where having regular smear tests is part of the strategy around early detection for cervical cancer (Hendry et al., 2012).

Subtheme three looked at experiences of aftercare, with participants describing that they did not feel they received care that was appropriate to the invasive nature of the procedure. This may link to a need for trauma informed care as women who have had experiences of sexual trauma could find the procedure incredibly difficult and re-traumatising (Huber et al. 2009). Additional models of patient-centred care and consultation with psychologists could also help, along with training and considering approaches which may help the most vulnerable patients (Poleshuck & Woods, 2014). Participants also described a sense of concern for lack of follow-up appointments following their procedure. This caused particular concern in participants that were nulliparous as they described they didn't know what to look out for which caused them some anxiety. This may point to a need to consider follow-up appointments and to prioritise this as part of standard care, such as checking if the IUD is in place. A lack of consistent offering of follow up appointments across different services may point further to NHS pressures in terms of waiting lists for appointments and difficulties with staffing (Montgomery et al., 2017; Chakrabarti & Markless, 2022).

5.2.5 Theme 5 – Perceptions of clinicians and services

This theme focused on how participants view clinicians and services and how this changed following their IUD experiences. The first subtheme looked at participant's perceptions of clinician's competence, in relation to their own experiences of counselling and the procedure. This links to research which found that when clinicians found insertion to be easier, women reported no or only mild pain, which increased as the procedure became harder for clinicians (Beckert et al., 2020). In addition to this, research found that patients had more trust in doctors because they are seen to have a lot of experience (Higgins et al., 2016)

Another point to consider may be looking at which factors make a clinician appear competent to patients. As research in the SLR described, some clinicians may lean on senior staff or even refer to other services if they don't feel confident in providing information or

administering a procedure they are not well versed in (Davis, 2014; Rubin et al., 2013). Further to this, research has described clinicians using a 'sounding process' which determined whether or not a procedure was going to be successful (Wright et al., 2016). Some of these processes may be unfamiliar to patients and therefore if a procedure was abandoned or particularly difficult, there may be aspects which would be helpful for clinicians to communicate to aid understanding of procure and processes of referral. Overall, both sets of results may suggest a need for adequate training and support for clinicians to keep their competence levels up to a good standard.

In the second subtheme, participants described feeling a lack of trust in clinicians and services, following the care they received. This links to research where women described their clinicians refusing to remove their LARC and minimising their side effects, leading them to feel betrayed and lose trust in their clinicians (Caddy et al., 2022). This also ties to research which describes how some clinicians dispute their patients experiences, explaining the 'evidence base', which clinicians may feel provides more understanding to their issue but more often discredits a patients' embodied experience (Stevens, 2018). Further research reiterates this point as one study described women did not return to their clinician following their IUD experience, with one woman going to several clinicians only to be denied removal on each occasion, describing the experience as like she was on 'probation' (Amico et al., 2016).

Further to these, a factor to consider is the difficulty in providing patient centred care when pressured environments can make providing even basic care difficult (Manzer & Bell, 2022). Clinicians may grapple with this, alongside research which found many gynaecologists are experiencing burnout (Bourne et al., 2019) within the context of services that are under increasing pressure (Kershaw et al., 2022).

In the third subtheme participants described feeling empathy for their clinicians and colleagues who may be learning, despite having a negative experience of the procedure.

This may link to literature around feminist theory where women are often described to position themselves as caregivers, even when they are in the position of receiving care or

experiencing distress (Borrell et al., 2014). Some literature suggests this can be a burden for women but can be difficult to disentangle as it forms part of gender stereotypes which have become internalised (Kramer, 2005).

5.2.6 Theme 6 – Gender roles and empowerment

The final theme looks at how women's gender roles and how women are positioned affect the view of their experiences and how these can be interpreted. It focuses on concepts around pain thresholds, experiences of shame and examples of feeling empowered to advocate for themselves.

The first theme described this sense of participants needing to justify their pain experiences, persevere despite high pain levels and at times be silent and hide the level of pain they were experiencing. This theme also looks at the idea of women's suffering being part of a woman's life and that women have learned to live with this. Research has evidenced clinician's beliefs that even when offered pain relief, women often decline (Sewell & Vincent, 2013). This is reinforced by research where clinicians believe women should be encouraged to work with their pain experiences, rather than being offered a variety of pain relief which they described as being undermining (Lally et al., 20087).

This links to research which suggests women experience and report higher levels of pain than men (Bernardes et al., 2008; Keogh, 2022). Further research found these gendered experiences of pain can describe women as 'emotional' when experiencing pain, with men being referred to as 'brave' in comparison (Samulowitz et al., 2018). This may result in women experiencing a need to have to explain and justify their pain, for fear of not being believed. This is further reinforced by several examples of clinician's dismissing concerns relating to painful experiences such as cramps or uncomfortable side effects due to the IUD (Dehlendorf et al., 2014), alongside dismissal of chronic painful gynaecological conditions (Hadfield et al., 1996; Husby et al., 2003; Ross et al., 2023). This could be

understood further through gender inequality, with women experiencing invalidation through healthcare when they express or seek support for ill-health (Borrell et al., 2014).

In the second subtheme women describes experiences of shame, often after they had experienced adverse reactions due to distress or pain of the procedure or IUD. Some women described being embarrassed by being outwardly emotional due to the pain they experienced at work following their IUD insertion. As research has suggested, women often feel emotions such as embarrassment (Tancman et al, 2022) during gynaecological examinations and fears of judgement from clinicians (Yanikkerem et al., 2009). Therefore, this already emotionally heightened state may increase as a result of concerns or anxiety that is felt during the procedure. This could also link to historical ideas of women being referred to as 'hysterical', with women often being depicted as dramatic, as assessed by the male gaze (Tasca et al., 2012).

The last subtheme described women's experiences of self-advocacy and feelings of empowerment. Participants described the sense of power they had regained through these difficult experiences and how it had changed their approach to services. This links to research where women described clinicians repeated refusal to remove their LARC, which eventually led to them insisting on the removal and requesting for another clinician (Higgins et al., 2016). This relates to broader ideas of power, and autonomy over one's body and reproductive decision making (Gomez et al. 2018). This ties further to evidence which suggest women's power can be undermined by using IUDs as it gives clinicians more power in medical settings where there are already disproportionate power dynamics (Morison, 2023). This also links to results found in the SLR where clinicians feel their role should be to equip women with the right knowledge and understanding to feel empowered to make the decisions that are best for them (Biggs et al., 2020; Berlan et al., 2016). This moves away from ideas of clinicians taking on paternal roles in order to act in a perceived patient's best interest. This is understood to undermine women and depict them as ill-informed, vulnerable, and in need of protection (Morison, 2023).

5.3 Reflections

Coming to the end of my research, my motivations have remained mostly the same: my first and initially only motivation was to seek out stories of distressing coil procedures to find patterns and use this to create guidelines to minimise future distress. My second motivation that developed throughout this was to provide the participants with a sense of validation and to make them feel less isolated in their experience. This made me reflect on the positionality of the researcher and question ideas of neutrality, particularly considering feminist epistemology and the focus on providing a safe and supportive environment, particularly when considering groups such as women who have been harmed in health practices in history (Narayan, 2004).

My own concepts of what I considered to be distress have changed throughout this process. It made me realise that while I had good intentions, I clearly held some judgements about what I felt was considered traumatic or distressing. I started the research expecting to interview women on their experiences of pain and how distressing this process was but I found there were many different ways the procedure could be distressing, sometimes completely separate to the pain process. Using critical realism has helped me to consider the social constructs that may lie in and around observable "truth" and I'm grateful to say I'm glad I found the epistemology that allowed me to interrogate some of these findings throughout.

I've gone through several stages of emotions throughout this project. Initial frustration at struggling for so long with search terms and learning how to do an SLR, surprise and shock at how many women came forward and finally sadness and anger at how many had life changing experiences. As I write the end of my theses, there are already new guidelines that came out in May that have been updated to consider pain options. This gives me some sense of hope. I finish by thinking about the women I spoke to and their enormous strength and courage — I also think of all the women I didn't get to speak to who wanted to share their stories. I hope in time there will be less and less of these experiences.

5.4 Critical appraisal

The critical appraisal tool chosen was the CASP (Long et al., 2020), with the following Table 8 summarising the study's strengths and limitations.

Table 8- Critical appraisal table

Design and methods

Strengths

- + There was a good radio of sampling across nulliparous/parous women and across all age groups.
- + There was a clear statement of aims and reasoning for why the research was considered to be addressing a gap in the literature.
- + An EbE was part of the research team and was consulted throughout the research (setting up/interview schedules and pilots/data analysis and dissemination) as well as the team's own insider experiences of being coil users, both of which helped with understanding the experiences being investigated.
- + Two consultants were involved, who had experience in the counselling and administration of coil procedures, working in both primary care and specialist care. In addition to this, both supervisors were specialists in clinical health, complimenting my own clinical training alongside working with an EbE. The diversity of the team allowed for a wealth of different expertise and perspectives.
- + The qualitative methodology chosen was appropriate to address the topic in sufficient depth, while allowing the participant freedom to explore the topic. Reasoning for the use of thematic analysis was explained alongside consideration for other methods.
- + The inclusion criteria did not discriminate against women who have certain gynaecological diagnoses or histories of difficulties. This decision was made to reduce exclusion of their experiences which is also appropriate at the early stages of exploring an under-researched topic area.

Limitations

- While there was some ethnic diversity within the research team, I was the main researcher and interviewer. As a white woman my own representation may have affected the diversity of the participants that I was able to recruit. This could have been improved with more than one researcher completing interviews as well as considering other ways of recruitment such as approaching community-based spaces.
- Due to the inclusion criteria of not excluding women with a history of gynaecological complications or diagnoses, this may mean the data itself is less generalisable if there are additional variables that may have affected participants' experiences. This is also taking into account that a large proportion of women wait considerable periods of time to receive diagnoses in gynaecology so it is difficult to estimate which proportions of women experience certain conditions (Hoffman & Tarzian, 2001; Wiggleton-Little, 2023).

- There were no exclusion criteria on unlikely events such as perforation. This was the case for several participants which in a sample of women that had negative experiences may seem more likely, while the rate in the general population is described as very low (Group, 2008). This may affect the generalisability of the sample but may also suggest a need for further research in prevalence rates.
- There was a lack of formal PPI group set up with several experts by experience, from the study's inception. This could have used more aspects of co-production within the design and execution of the research. The inclusions of more medical consultants over additional EbE's may have shaped the research in leaning towards more medicalised and procedural aspects of the experience. However, this was also considered within budget constraints of paying EbE's for their time and prioritising the ethics and theory-driven understanding of paying women for their labour (Hoskyns & Rai, 2007).

Recruitment & data collection

Strengths

- + The recruitment strategy and inclusion/exclusion criteria were clearly described.
- + Data were collected using semi-structured interviews which allowed for in depth and 1:1 discussion of a sensitive topic.
- + Participants were recruited from the general public rather than from NHS services as this allowed for a wider pool of participants and did not rely on services to refer participants which could have involved some bias in sampling.
- + The details of the interview were shown through the example of the topic guide included in the appendices.

Limitations

- The use of predominantly online spaces for recruitment and signing up for the study may have excluded participants who are not able to have access to the internet or devices.

- Due to a lack of resources, not all participants that registered interest were able to be interviewed which was regretful. All prospective participants were however contacted, thanked for their interest and given links to support resources.

Researcher and participant relationship

Strengths

- + The use of a reflective diary allowed space for reflection after interviews and to consider any biases throughout the research process.
- + Meetings with the research team allowed for further opportunities in reflexivity.

Limitations

- The use of video for interviews may have limited the rapport built with participants which could have potentially been richer if interviews were conducted face to face.

Ethics

Strengths

- + The potential for participant distress is considered in sufficient depth with distress protocols given as an example in the appendices.
- + Telephone calls were arranged prior to interviews to assess mental health state and any risks, to safeguard participants and ensure the interview did not trigger or bring up any undue distress. Time for reflection and a check-in was completed after every interview to establish participants well-being and experience of the interview.
- + Participants were given clear explanations on informed consent (including the right to withdraw at any stage) and confidentiality (anonymisation of data and storage) in written form and in verbal form prior to the interview beginning.
- + Appropriate ethical approval was sought and evidenced in the appendices.

Analysis and findings

Strengths

- + Analytic stages were described as recommended by the authors, providing clear documentation and additional information in the appendices to show coding and theme development stages.
- + The number of participants was considered sufficient based on the choice of analysis.
- + My own biases and impact on shaping the research was reflected on and evidenced in reflective diary extracts. This was alongside other opportunities such as those in reflexive practice meetings.

Limitations

- The use of member-checking with participants may have allowed for further layers of detail and understanding which could have been added as a separate section following the data analysis, with an aim to consider all perspectives.

Strengths

Value of the research

- + The research added the first in-depth account of IUD procedures in UK health settings to the existing literature.
- + The research provided some clear examples of how practice can be improved to reduce the likelihood of procedures being negative experiences.

Limitations

- The research was not able to provide tailored guidelines for women who may have specific needs (e.g. nulliparous women or those with specific trauma or gynaecological diagnoses) so future research should focus on this.

5.5 Clinical implications and recommendations

This section covers clinical implications that have arisen from the data and recommendations for practice and research. Please see Table 9 which shows the clinical implications and recommendations.

Table 9- Clinical implications and recommendations

Clinical implications

Experiences of negative coil procedures can lead to an impact on future gynaecological appointments or disengagement with services which can put women's health at risk. Anxiety or concerns can also impact in the perinatal period which can impact on women's life choices and on perinatal services.

Recommendations

- -Services and clinicians should plan the time for debrief following procedures and follow up appointments after difficult or distressing procedures. Clinicians should have discussions with women on the best ways of supporting them in future appointments, e.g. to include this in the notes for consideration of future appointments such as smear tests so staff know to take extra care.
- GPs should be aware of specialist services which support women who have experienced gynaecological trauma or difficulties, as well as appropriate primary care settings.
- Women could be encouraged to bring a supportive person to their appointment that could also assist them after the procedure if they felt unwell or unable to take themselves home.
- Clinicians should ask for explicit consent before and during the procedure if they need to bring another colleague in for assistance.
- Where possible, the clinical environment should be considered, in order to make the patient feel as relaxed as possible and to ensure appropriate privacy.

- A point for future research may be to look at women's experiences of procedures if they have specific needs such as gynaecological complications or those who have experienced trauma.
- Future research should also focus on exploring marginalised women's experienced in more depth as this study was unable to do so.
- Further research is needed to examine clinicians perspectives on IUD procedures in UK based health settings.

Several participants described experiencing perforation and the lasting impact this had on their body and quality of life.

Current figures suggest perforation rate for the IUD are low (Group, 2008) however this may be worth investigating further in research settings if these are solely based on women reporting them to the manufacturers.

Women with previous trauma are being further traumatised or triggered during the procedure.

-Women should be offered preinsertion counselling appointments to discuss the IUD advantages and disadvantages, to consider their history and how they can be supported in the appointment as well as after. Clinicians should receive specialist training and support from staff such as nurses and psychologists on how to work in a trauma informed way, build rapport and reduce anxiety (Poleshuck & Woods, 2014).

Women and clinicians are feeling rushed in appointments which can result in negative and distressing experiences or adverse outcomes.

- -Appointment time should be set to include sufficient time to counsel women and pre-assess anything that may make the procedure more difficult, either before the procedure or in a separate pre-counselling appointment.
- Clinicians who are less familiar with the process should be supported by and have access to more senior colleagues.

Women are experiencing painful procedures due to a lack of pain relief or pain management strategies being considered.

-Clinicians should be aware of multimodal pain management strategies that includes both pharmacological and psychological strategies (McCarthy, 2018; Murty, 2003). Clinicians should also be aware of setting the scene for the appointment and providing information provision throughout the appointment, to ensure women feel in control and are consenting throughout the procedure. It is important to also consider logistical factors such as research which has used trials of removing equipment such as stirrups and the option for women to insert speculums themselves (Seehusen et al., 2006) in order to reduce pain experiences.

Gynaecology or medical staff may express reluctance to partake in IUD procedures or training for fear of litigation or due to time pressures of other appointment and waiting lists, alongside difficulties maintaining competency.

- -It would be worthwhile to consider how best to support clinicians' skills once they are trained and consider the culture of environments and how these impacts on the recruitment and retention of staff.
- -It may also be useful to explore how medical staff can support indirectly by training nursing staff in procedures which was supported by both professions in the literature (Fleming al., 2019; Davis, 2014).
- The use of medical educators and health educators to assist and support with training could be considered based on suggestions in the literature (Ma & Shah, 2016).

5.6 Conclusions

This research has given an insight into some of the challenges faced by women during IUD procedures in the UK. It has provided a much-needed addition to the literature by indepth assessment of what can make an experience negative. The SLR has provided some context into clinician's perspectives in high income countries and some of the challenges that they may face in providing appropriate care within their clinics. Overall, it is clear women's experiences of IUD procedures can be negative for a variety of reasons. Amongst all of this, there is a picture of a National Health Service which is stretched and understaffed (Montgomery et al., 2017). This study hopes to provide some concrete examples of small changes that can be implemented during IUD procedures and counselling that can make a difference for women, without placing additional burdens on clinicians. This can include clinicians providing thorough assessments of suitability to the method, empowering women with knowledge of the procedure and how they can be cared for during and after, multimodal pain management (options of psychopharmacological methods and psychological preparation) (McCarthy, 2018; Murty, 2003) and a consideration for trauma informed practice (Huber et al., 2009). While some of these steps may take additional time, this could have the potential to take away from additional follow up appointments for unexpected side-effects if patients are better prepared to make an informed decision (Wu et al. 2023). Alongside this, women who have better experiences with IUD procedures are less likely to experience anxiety with further gynaecological procedures (Glover et al. 2002) and are less likely to avoid any gynaecological screenings or treatment that could put themselves at greater risk (O'Laughlin et al., 2021).

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Appendices

Appendix A – Reflective diary extracts

Interview reflective diary

Date: October 2023 (exact date and some information redacted for anonymity purposes)

I had another really good interview today but for some reason straight after I felt some internal panic. Am I just doing this because I had a coil? If all of this data is almost readily available and so many women want to come forward is it still worthwhile, was I just looking for validation for myself? I don't know why I keep worrying about this but it's making me question why I'm doing this. I'm going to come back to this later and see if this feeling settles as I know objectively it doesn't make sense.

Date: November 2023 (1 week later)

I had a smear test and I felt really anxious. Never had that before. It's made me realise now that my previous feelings might have been absorbing myself into the data and stories a bit too much. I've re-read my previous entry and I think part of the reason I felt the way I did was due to some transference in the interview as well as doing a few interviews in a row due to some blocks of time we had in the course. I've come back with a fresh mind and realise that I need to spread out my interviews a bit more as even an hour or two isn't quite enough if there are several in one day. This made me question this whole idea of qualitative research and how Braun & Clarke describe it – how attainable is it when we're under such a time crunch? I think a lot of it is just trying to do your best to get good quality data and to allow myself enough time for analysis. It's just difficult as the SLR is taking wayyy longer than I thought and that's putting the pressure on even more.

Date: December 2023

I've got to the end of data collection! It feels bittersweet. I am happy but I also realised I really enjoyed the interviews and speaking to women, as much as the experiences were awful, it felt like we were able to connect and share some hope at the end. They were all so lovely too, but all so different. As I've been doing transcribing this has reminded me of the lonely parts of research. I've struggled with that part as I love being able to talk to people and now my placement is less clinical it's been a bit tough. Everyone's looking forward to finishing teaching soon but at the moment seeing people is the highlight of my week! Trying to remind myself it won't be like this forever. I need to try and set some boundaries to take a break over the holiday, will see if I can stick to that!

Appendix B - Reflexive practice meeting diary entries

Reflection on meeting with EbE on 13.05.24

I met with [name retracted] this morning to discuss our results and to see how they land. I had added some comments that I was unsure about and I went into the meeting feeling quite nervous. I felt like the results were at a final stage I was happy with but because they have taken so long to develop, I had this dread of what if she thinks they don't make sense or isn't clear or she finds it hard to relate to any of it? I guess the latter is what I was most worried about because as I went through each interview, I felt there were sooo many similarities

across so I hoped the generalisability of the study worked and this felt like a test of that! Anyway once we discussed a bit in the meeting she didn't have many comments initially and I was really trying to go through each theme carefully and I kept checking in to see if she had any questions or comments. Then towards the end she just said that she thought it was great and really understood the points in relation to her own experience! I actually felt so relieved at this stage and when we went through my additional notes she reaffirmed some of this for me too which was great. I was aware throughout of power dynamics and her feeling like she could disagree but this was something we'd spoken about before and she has always voiced her opinion so I double checked this again today – then realised this was just some doubt sinking in again! She said she'd like to be involved in the dissemination stages which is great, hoping this means it has been a good experience so far for her. I left that meeting feeling relieved and I realised it's been a few days since I read my results and they finally feel like they really fit together nicely. I might not look at them again for a while just in case I change my mind!

Reflection on meeting with GP/primary care consultant – May 2023

I had a research meeting with our GP consultant today. It was so interesting hearing about her experience but I did come into the meeting feeling a bit nervous. What would she think about our study and would she understand the intention? As we spoke about pain relief I found some of my assumptions challenged as I learnt the realities and also some of the practicalities that make it difficult or can mean pain relief is essentially ineffective. I found this really hard to consider – also made me think of why has so little research been done to see what is effective? Sometimes it feels like women's health is just seen as "complicated" and people hold their hands up and go oh no well we tried! Can't help but feel frustrated by it all.

Reflection on meeting with specialist consultant – April 2024

Today I met with our other consultant and I discussed my initial themes and spoke about my analysis and how I had come to the conclusions I had. There was some discussion of one theme where I described my reasoning for its inclusion in the 'gender roles' theme as I felt quite strongly this was a role that women took but they disagreed and felt it fit in better elsewhere but understood the interpretation. After I left the meeting I went for a run and came back to the results. Looking at them again I realised it does make sense it this other theme but I can still include my explanation, that wasn't the part she was saying didn't work. Also looking at the results, so many themes overlap naturally and could fit in different places depending on how you look at them – I don't think there is a right or wrong here. I'm curious as to why I felt so protective over this bit, was I worried about losing the feminist lens? I think I'm hyper aware that in previous research settings I've always took the senior researcher's views on board and at times this has meant changed my own stance on something. But today that wasn't the case, so maybe this was my own exercise of trying out what it was like to say no / I know the data best as I've been so immersed in it. I guess I'm just trying to bring as much literature and background to this as it's an area I'm passionate about so will try and be less hard on myself in the process.

Appendix C - Participant Information Sheet

Form EC6 Participant information sheet



Women's negative experiences of IUD procedures

University of Hertfordshire



Contact the principal researcher,
Sabrina:

(s.pilav@herts.ac.uk)



Why are we doing this study?

Women's health and particularly gynaecological (reproductive) health is an area that currently has limited research. Following several media articles that have highlighted some of the issues women face with coil (also known as IUD) insertions/removals, we are carrying out research to better understand women's negative experiences of these procedures. We hope this research will be



used to develop new guidance for patients and professionals that reduces the risk of coil procedures being experienced as distressing.

What does the study involve?

If you do decide to take part, you will be asked to complete an online consent form (on the next page) and then to provide some basic information about yourself via a simple online survey (age, gender etc). To find out about your coil experience, we would like to have a conversation with you. After completing the online consent/survey, a researcher (Sabrina Pilav) will be in touch to arrange a convenient time to do this. The conversation will be via video call or in person (subject to location). The conversation will be friendly and relaxed in style, and last around an hour to 1.5 hours. During this we will ask you about your experience of the coil procedure and details around this topic. You do not have to answer all the questions. If you do not want to answer a question, we ask that you simply tell the researcher you are talking to, and they will move on. The information you give will be confidential and anything that you say will not be traceable to you.

Who can take part?

If you are aged 16+, have had a coil fitting/removal in the last 2 years in a UK health settings (GPs, sexual health clinics, gynaecologist, and any other medical setting) that you found distressing, and are able to provide us with a valid UK phone number (mobile or landline)*, then you are eligible to participate. It is completely up to you whether you decide to take part in this study. Agreeing to take part in the study does not mean that you must complete it. You can choose to withdraw at any point, including during the conversation itself; you would just need to tell the researcher you are talking to (Sabrina Pilav). If you wish to withdraw after the conversation, you would just need to email Sabrina at s.pilav@herts.ac.uk to let us know – we wouldn't ask you for a reason for this, we'd just respect your wishes. We will keep any data that you have provided up until the point at which you withdraw and use it in our analyses unless you explicitly ask us not too; if you make this request and it is not possible to remove your data at that stage then we will inform you.

* We require a valid UK phone number to enable us to have a telephone pre-screening and confirm arrangements prior to the interview.

How will my data be used?

The researchers involved in this study will keep your data safe and secure, in accordance with GDPR guidelines. Your contact details will not be shared with any external agencies or companies and this data will be deleted upon completion of the study. The recorded interview will be deleted after it has been transcribed (typed up) and the anonymised transcript will be stored in a secure folder on a university server for analysis purposes. If you would like us to withdraw your data, you can do this up to the point that data collection is complete. Please contact us using the details below to request this. After analysis, the

anonymised transcript will be moved to the University of Hertfordshire's Research Archive (UHRA) – see 'will my data be required for use in further studies?' below.

Will my data be kept confidential?

Your decision to take part and any data that you provide would be kept confidential. At the point at which your conversation is transcribed it will be anonymized, that is, any identifying information given during the conversation (such as names, places) will be removed. The transcriptions (Word documents in digital format) will be stored separately from consent data. The only identifier will be an anonymity code which we will ask you to create at the end of the brief online survey. Please note, if you



tell us something that leads us to believe that you or others are at risk of harm, then we will act to help you. In most situations this will involve signposting you to sources of information and support. Where we are concerned that there is risk of significant harm, then we may be obliged to pass this information on to the relevant safeguarding organisation(s) so that they can help you.

Will the data be required for use in further studies?

Anonymised transcripts will be stored indefinitely within the University of Hertfordshire's Research Archive (UHRA). This will be made available to other researchers 'on request', meaning that other researchers will be given access to them if this is for the purpose of performing further analysis for the benefit of science. If you do not want your data to be stored in the research archive you may request this at the start of the interview.

What are the possible disadvantages of taking part?

Taking part in this study requires you to have a conversation about an event that you experienced as distressing. It may therefore be difficult at times but we would aim to make this as comfortable as possible for you. It is your choice to share as much as you want but there is the possibility that talking about a distressing event could trigger painful memories. We will do a risk assessment prior to you taking part to establish whether this would be suitable for you and if so, what can be done to minimize any distress caused.

What are the possible benefits of taking part?

We hope that this research gives you the opportunity to talk about your experience in a relaxed environment, where you feel in control of what you would like to share. We also hope that this research will be used to create guidelines for women deciding to have the coil (and the professionals who support them) so they are aware of their rights and can make an informed decision. We will provide you with a £10 voucher as a token of appreciation for taking part in the study (we need some personal information to process voucher payments – your name, address, email address and phone number. As with all other data, this will be stored securely for the duration of the study and then deleted). Note: we will be running checks to satisfy ourselves that every participant is eligible to participate (see 'who can take part' above). If we suspect that this is not the case, we reserve the right to prevent participation and to withhold voucher payments.

Who has reviewed this study?

This study has been reviewed by the University of Hertfordshire Health, Science, Engineering and Technology Ethics Committee with Delegated Authority. The UH protocol number is [to be added on approval]

Who can I contact if I have any questions?

If you would like further information or would like to discuss any details personally, please get in touch with me Sabrina Pilav, by email: s.pilav@herts.ac.uk.

Although we hope it is not the case, if you have any complaints or concerns about any aspect of the way you have been approached or treated during the course of this study, please write to the University's Secretary and Registrar at the following address: Secretary and Registrar, University of Hertfordshire, College Lane, Hatfield, Herts, AL10 9AB.

Appendix D – Risk Assessment/Risk Protocol

SCHOOL OF LIFE AND MEDICAL SCIENCES UNIVERSITY OF HERTFORDSHIRE

Ref No.	
Date	
Review Date	
	OFFICE USE ONLY

Life and Medical Sciences Risk Assessment

The completion of this is an integral part of the preparation for your work, it is not just a form to be completed, but is designed to alert you to potential hazards so you can identify the measures you will need to put into place to control them. You will need a copy on you when you carry out your work

	General Information					
Name	Sabrina Pilav	Email address		Contact number		
Supervisor's name (if student)	Dr Katie Newby	Supervisor's email address	, 0	Supervisor's contact number	07842600795	

	Activity
•	Main research project study: 'Exploring women's negative experiences of distressing coil (IUD) procedures'.
Brief description of activity	Interviewing women about their experiences of coil procedures.

Location of activity	Either:
	 Virtual/online (Microsoft Teams or Zoom); N.B. data (audio recording and transcript) will initially be held within the meeting software (MS Teams/Zoom) and then downloaded to a OneDrive folder owned by supervisor and shared with student. On campus (in a pre-booked LMS room). In participants homes (only where necessary e.g. participant has barriers to meeting online or on campus such as disability, caring responsibility etc).
	Participants are being recruited through social media and online platforms (GP forums, Mumsnet.com) and snowball sampling.
Who will be taking part in this activity	The principal researcher (Sabrina Pilav) will be carrying out the interviews; participants.

	Types of Hazards likely to be encountered						
□ Computers and other display screen	☐ Falling objects	□ Farm machiner _y	□ Fire	□ Cuts			
□ Falls from heights	☐ Manual handling	☐ Hot or cold extremes	☐ Repetitive handling	☐ Severe weather			
□ Slips/trips/falls	□ Stress	□ Travel	□ Vehicles	☐ Workshop machinery			
□ Psychological distress (to interviewer or interviewee)	□ Aggressive response, physical or verbal						
Other hazards COVID-19 not listed above							

Risk Control Measures

List the activities in the order in which they occur, indicating your perception of the risks associated with each one and the probability of occurrence, together with the relevant safety measures.

Describe the activities involved.

Consider the risks to participants, research team, security, maintenance, members of the public – is there anyone else who

could be harmed?

In respect of any equipment to be used read manufacturer's instructions and note any hazards that arise, particularly from

incorrect use.

hazards	0.0	they be harmed?	Control Measures – what precautions are currently in place? Are there standard operating procedures or rules for the premises. Are there any other local codes of practice/local rules which you are following, eg Local Rules for the SHE labs? Have there been agreed levels of supervision of the study? Will trained medical staff be present?	the residual level of risk after the control measures have been put into place? Low Medium or High	risks that are not controlled or not adequately controlled?	Is more action needed to reduce/manage the risk? for example, provision of support/aftercare, precautions to be put in place to avoid or minimise risk or adverse effects
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Computers and other display screen	Participants and Researcher	Eye strain, headache, posture	The LMS Heath and Safety protocol will be followed. The interview will take approximately 1-1.5 hrs. The participant will be reminded to stretch at least once during this time. They will also be asked halfway through if they would like to take a break. The researcher will stretch at least once during the interview. They will monitor their need for a break and pause to take this if needed. Researcher will be using DSE guidelines.	Low		No
Psychological distress (to interviewer or interviewee)	Participants	The topic area could be experienced as distressing	The principal investigator (PI) will conduct a risk assessment with participants before the	Low	No	No

interview to establish if there are any background risks that may make them more likely to be distressed or find the events distressing. If during the interview the investigator found the participant was becoming distressed or found parts of it difficult, the interview would be terminated. If during the interview the participant found some questions difficult but was keen to proceed, the investigator would do so with caution, checking in regularly throughout the interview and being vigilant to any signs of distress or discomfort both during and after the interview. The investigator is a clinician in training with a background in mental health and experience of managing severely distressed individuals. In the unlikely case that the participant is distressed, the investigator will follow a protocol of a) pausing the interview and allowing the participant to either take a break or terminate the interview, and b) checking in with them after the interview and in the coming days, as well as referring them to any support systems if deemed appropriate.

Psychological distress (to interviewer or interviewee)	Researcher	The topic area could be experienced as distressing	The PI (researcher conducting the interviews) will selfmonitor their own emotional response during interviews and request that an interview is paused/terminated if distress is experienced. The PI will contact her research supervisors following any	Low	No	No
			experiences of distress for a debrief. There are also mechanisms to request/receive support within the wider DClin teaching team. The researcher will regularly complete a reflective diary to reflect and monitor their psychological wellbeing throughout the interview process.			
Aggressive response, physical or verbal	Researcher	Safety when conducting interview in participants' homes	The PI (researcher conducting the interviews) will only agree to interview someone in their own home where necessary e.g. participant has barriers to meeting online or on campus such as disability, caring responsibility etc). LMS Lone Worker Guidance will be followed (see lone worker risk assessment).	Low	No	No
Travel	Researcher	Physical harm travelling to venue and/or from unknown persons in homes of those being interviewed	The researcher will inform the research supervisors of safe arrival and departure to/from the interview venue. The researcher will ensure they have breakdown cover for their car.	Low	No	No

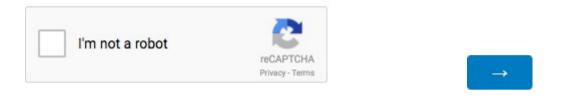
	Participan and Researche	infection	The researcher will cancel and rearrange any inperson interviews if they or the participant are experiencing symptoms of COVID-19 (participant will be asked to inform the researcher of any symptoms ahead of the interview), or if they have recently tested positive for COVID-19.	Low	No	No
List any other documents relevant to this application Life and Medical Sciences Health and the science of the		ciences Health and Safe	ety documer	nts		

	Signatures						
Assessor name	Sabrina Pilav	Assessor signature	Blor	Date	05.06.2023		
Supervisor, if Assessor is a student	Katie Newby	Supervisor signature	Kihi Nurby	Date	26.06.2023		
Local Health and Safety Advisor/ Lab Manager	Alex Eckford	Local Health and Safety Advisor/ Lab Manager signature	Alex Eckford	Date	19 th July 2023		

Appendix E – Demographics Form

1. Study sign up and demographics data

Please tick the following box in order to proceed



Thank you for your interest in our study

About you

Firstly, we would like to collect some information about you. We will use this to describe the group of participants we interview.

For each of the following questions, please select the option that best describes you

How old are you?

16-20	
20-24	
25-29	
30-34	
35-39	
40-44	
45-49	
50-54	
55 +	

What is your gender identity?
Female
Non-binary
Gender-queer
Other (please state here)
Prefer not to say

How would you describe your ethnicity?

A - White

English/Welsh/Scottish/Northern Irish	
Irish	
Gypsy or Irish Traveller	
European (please specify)	
Any other white background (please write below)	

B - Mixed/ multiple ethnic groups

White and Black Caribbean	
White and Black African	
White and Asian	
Any other mixed/multiple ethnic background (please write below)	

C – Asian / Asian British

Indian	
Pakistani	
Bangladeshi	
Chinese	
Any other Asian background (please write below)	

D - Black/African/ Caribbean/ Black British
Black African
White African
Caribbean
Mixed heritage
Any other Black background (please write below)
E – Other ethnic background
Arab
Afghan
Iranian
Iraqi
Turkish
Any other background please write below:
Prefer not to say
Which religious background do you identify as?
Buddhist
Christian
Hindu

Jewish	
Muslim	
Sikh	
Other	
No religion/atheism	
Decline to answer	

How would you describe your financial situation?

- Very comfortable I have everything I need and more
- Comfortable money is never an issue
- Fairly comfortable but it is necessary to keep an eye on money
- Things are ok, but money was tight sometimes
- Money is a problem a lot of the time, it is always a struggle to get the basics (food, clothes, heating)

Have you ever been pregnant?

Yes

No

Prefer not to say

If so, have you experienced childbirth?

Yes

No

If yes, what childbirth experience did you have?

Planned vaginal delivery

Unplanned vaginal delivery

Assisted vaginal delivery

Scheduled caesarean

Unplanned caesarean

Vaginal birth after c-section (VBAC)

Scheduled Induction

Your contact details

So that we can contact you to arrange the conversation, please provide the following information

Your name:

Your telephone number:

Your email address:

Please select your preference for how we have the conversation
Online interview (e.g. via Microsoft Teams or Zoom)
Face-to-face interview (only available to those living within a 10 mile radius from the University of Hertfordshire or London area)
Anonymity code

Now we would like you to create an anonymity code.

We ask you to do this so that we can identify your data if needed e.g. if you ask us to withdraw it. Please provide us with the following information:

The day from your date of birth (e.g. if your date of birth is 25/01/1990 then you would put 25): Your initials:

Your house/flat number:

Thank you, we will be in touch with you shortly to arrange the interview.

Appendix F – Interview Guide

Could we start with why you decided to have the coil fitted and how this came about? Did you have any concerns in advance or reasons to believe it might be a negative experience?

Where did they first learn/find out about the IUD?

Prompts if needed:

Did they have a discussion with their health clinician?

What was the reason for the IUD specifically?

Did they know/ do they know about other forms of contraceptive/ hormonal treatment? How did they find this out?

Women who had gone through childbirth – did they feel rushed/pressured into having the IUD fitted? Women who haven't, was this discussed/mentioned?

Did you have any information prior to the procedure or about pain or side effects?

Any screening of MH issues or trauma?

Any other previous gynae issues or difficult procedures?

Talk us through the procedure:

- What (if any preparation) for the procedure given by health professional in advance
- What they did in the days prior
- What they had on that day, any other significant events or stressors

- How did they feel on the day, any anticipatory anxiety?
- Go into depth about chat with clinician before procedure (tone of communication, environment created), feelings/ anxiety at this point?
- How did they feel/ relate to their clinician?
- Go through stages of the procedure itself
- Did they feel in control during the procedure? Was this mentioned at all?
- Pain relief, pain ratings, Were they offered pain relief and when was this offered? if so were they given options? Did they accept/decline this pain relief?
- Post procedure, feeling/ debrief / did they know what to do/ where to go if any complications arose or needed to have it removed?
- How was the rest of their day? / work / side effects? Return to work/activities How were the weeks/ months that followed?
- Removal?
- After removal
- Would you go on contraception again? The coil? Has this experience affected your relationship with contraception?
- Relationship with clinicians?
- Would you go to the doctor/ services / gynae following this? any anxiety or avoidance?
- Anything we've missed?
- Reflections on the interview and check in

Appendix G - Extracts from three interviews

Interview 5 - First introduction to the coil

Interviewer: OK. And in terms of your knowledge in advance of having the coil kind of fitted or any of that, did you have any concerns or any reasons to believe that it could be a negative experience?

Participant: I didn't want one and my nan had actually had a coil previously and it embedded itself into her womb, so I was already on the back foot of not wanting one. Everyone I know has had a negative experience with the coil, but in the situation I was in I knew it was the only option that I had at the time because if I have hormones in my body, I tend to get really depressed and really low and really down. So I opted for a non hormone coil but it was the worst thing I've ever done.

Interviewer: OK. I'm so sorry to hear that. And in terms of umm, when you mentioned about having hormones in your body, have you tried other types of hormonal contraception?

Participant: I've tried everything. Everything. Every contraception, yeah.

Interview 8 - Insertion experience

Interviewer Thank you, if it's alright, I might go into some more detail but so it sounds like the actual kind of rapport between yourself and the clinicians seem to be reasonably good?

Participant:

Yes. They were absolutely fine. They were exactly as one would expect. I didn't have a concern with them at all. The difficulty came, I think the first coil came out fairly reasonably fairly easy, but in order to clamp cervix and they weren't being unable to get a good a good

purchase with the equipment that they were using which led them to have three separate goes with three separate, no five separate goes with three separate bits of equipment. And each time obviously I was getting more and more distressed and in quite a bit of discomfort. I am in my [age redacted]. I'm obviously when I had it fitted before, I was 5 years younger and I think, you know, probably the cervix degraded somewhat. My age would probably indicate that also, you know, although I'm fairly early, I started to go through menopause early. So, you know, one might expect that things wouldn't be quite as simple as they previously were, but it was causing quite a lot of bleeding and we didn't really feel there was the option of not putting in a coil and so it was all just need to get on with it and get this done. Which was, yeah, I guess I was in a difficult position really. So yeah, it was that, you know, the equipment...their procedure with the equipment was just causing pain, causing discomfort and that was all leading to me becoming quite distressed. It's quite reasonable, given how uncomfortable was.

Interviewer Yes of course. So when you're talking about the procedure and kind of going through that did it feel like you could pause or stop at all or like you had to continue?

Participant: Yeah. Like I should continue. The alternatives...to be fair, the alternatives were discussed at that point. But you know, I was using a coil because that seemed to make the most sense for the position I was in, in terms of needing the HRT, needing the progesterone component to the HRT. In hindsight, I probably could have considered going back to using progesterone tablets and you know, all preparation I could possibly have used. Yeah I could have used something else but at the time, you know, we've got the coil out. It should be OK to put another one back in. And so, yeah, I think hindsight might have done things differently, but in the moment that wasn't, that didn't feel to be an option for me.

Interview 18 - Reflections

Interviewer: Mmm thank you. With all that in mind and the experience, are there are other specific things -I know you mentioned about wanting to be a bit more maybe honest about how difficult the experience, was there anything from their side or that you think could have made the experience better or less distressing or painful?

Participant:

Umm. Well, I think. I think just an acknowledgement... like I mean I get that it's a tricky thing to do because you don't want to scare women, especially if it's the first time this has ever happened to them. But just an acknowledge that this is obviously going to be painful, you know? And if you need to stop, we can stop all of that kind of stuff, you know, and I mean, I think she may have said that. I think she may have said if you need to stop, we can stop. But just yeah, to be told, you know, to have someone say, yeah, this must really hurt. That would be nice. And the sort of maybe just having a minute as well afterwards to just kind of sit and to pull yourself together, I think that would help too. And also I would have been nice beforehand to have like when I'd booked the appointment, it would have been quite good for somebody to have said, you know, do you have a plan to manage the pain for this or can we help you with that? That would be good.

Interviewer: And do you mean kind of post procedurally or during the procedure?

Participant:

I think before, I think before, I think actually you know when I made when you make the appointment and it would just be nice for someone to say you know, we probably ought to

just think about some pain, pain relief as part of this kind of, you know, either offering me something or ... I mean cos paracetamol did not do a darn thing and you know and I know that and I knew that before but umm but yeah, I just having some kind of, just kinds of things, you know, do you have someone to drive you home and can we can we just make sure that, you know you've got enough paying pain relief for this etcetera. I just think that that would be that would be a good thing.

Appendix H – Ethical approval



HEALTH, SCIENCE, ENGINEERING AND TECHNOLOGY ECDA

ETHICS APPROVAL NOTIFICATION

TO Sabrina Pilav

CC Dr. Katie Newby

FROM Dr. Simon Trainis, Health, Science, Engineering and

Technology ECDA Chair

DATE 16/11/2023

Protocol number: aLMS/PGR/UH/05435(3)

Title of study: Women's negative experiences of coil (IUD) procedures

Your application to modify and extend the existing protocol as detailed below has been accepted and approved by the ECDA for your School and includes work undertaken for this study by the named additional workers below:

Dr. Katie Newby (759874) Dr. Jenna Harrington

Dr. Neda Taghinejadi, neda.taghinejadi@conted.ox.ac.uk

Modification:

Additional worker added as detailed in the approved EC2 application.

General conditions of approval:

Ethics approval has been granted subject to the standard conditions below:

<u>Original protocol</u>: Any conditions relating to the original protocol approval remain and must be complied with.

<u>Permissions</u>: Any necessary permissions for the use of premises/location and accessing participants for your study must be obtained in writing prior to any data collection commencing. Failure to obtain adequate permissions may be considered a breach of this protocol.

External communications: Ensure you quote the UH protocol number and the name of the approving Committee on all paperwork, including recruitment advertisements/online requests, for this study.

<u>Invasive procedures</u>: If your research involves invasive procedures you are required to complete and submit an EC7 Protocol Monitoring Form, and copies of your completed consent paperwork to this ECDA once your study is complete.

Submission: Students must include this Approval Notification with their submission.

Validity:

This approval is valid:

From: 16/11/2023

To: 02/03/2024

Please note:

Failure to comply with the conditions of approval will be considered a breach of protocol and may result in disciplinary action which could include academic penalties.

Additional documentation requested as a condition of this approval protocol may be submitted via your supervisor to the Ethics Clerks as it becomes available. All documentation relating to this study, including the information/documents noted in the conditions above, must be available for your supervisor at the time of submitting your work so that they are able to confirm that you have complied with this protocol.

Should you amend any aspect of your research or wish to apply for an extension to your study you will need your supervisor's approval (if you are a student) and must complete and submit a further EC2 request.

Approval applies specifically to the research study/methodology and timings as detailed in your Form EC1A or as detailed in the EC2 request. In cases where the amendments to the original study are deemed to be substantial, a new Form EC1A may need to be completed prior to the study being undertaken.

Failure to report adverse circumstance/s may be considered misconduct.

Should adverse circumstances arise during this study such as physical reaction/harm, mental/emotional harm, intrusion of privacy or breach of confidentiality this must be reported to the approving Committee immediately.

Appendix I – Consent form and Participant Information Sheet

University of Hertfordshire

Consent form for participation in interviews

Study title: Women's experiences of distressing or painful IUD procedures

Principal Investigators: Sabrina Pilav, Dr Katie Newby, Dr Jenna Harrington

1.	I have read and u	nderstood the study info	ormation sheet					
2.	. I have had the opportunity to ask questions about the study							
3.	3. I understand that my participation is voluntary and that I can withdraw at any time, without giving any reason							
	4. I consent to the interview being audio recorded and the transcript of the interview being stored securely by the principal researchers at University of Hertfordshire							
5.	5. I consent to my data being written up for publication and used for related studies or educational activities. My name and other identifying details will not be shared and it will not be possible to identify me from any publications.							
6.	I agree to take par	rt in the study						
					or			
			_					
Name (of participant	Date		Signature				
Name (of researcher	 Date	-	Signature				

Appendix J – Study Poster





Women's Health Research Study

Exploring women's negative experiences of distressing coil (IUD) procedures

Have you experienced a negative coil procedure in the

last 3 years?

We would like to hear more about your experiences as we are looking to explore women's experiences to help to inform future guidelines for practitioners.

To find out more and to speak to us informally and confidentially, contact:

Sabrina

Trainee Clinical Psychologist

s.pilav@nhs.net

07851759832

Appendix K - Coded transcript extract

Interviewer: Mmm, well the next part really is about the procedure itself, so if you feel comfortable to and like talk me through kind of how that started and what happened throughout?

Participant: Yeah, no problem. So they kind of instructed me on like how to lay on the on the bed how to put my legs, which is fine, again, similar to like a speculum procedure, I remember them asking me to take a few deep breaths, which is fine...as a midwife myself, I know that these things, generally speaking, are better if you manage to relax, and that's not that's not possible for everybody. But I knew if I take a few deep breaths and try to relax as much as possible, I kind of thought that I might actually have a little bit of control over the pain that I experienced if I relax, which I don't think was the case at all. They were kind of talking me through it as they did it...they inserted the speculum....they kind of opened everything up and then they put it in and I've never really experienced anything like it before. Like it's a weird it's a weird thing to articulate actually, and to put into words, but it's the kind of pain that is so sudden and so severe from like zero to 10 /10 pain that like your body, goes into shock a little bit and yeah…the, the insertion itself, I think the like 2 seconds that I felt that pain for, <mark>if you think</mark> about it sounds like it's not a big deal because it's a relatively short period of time that you're feeling that pain for. But it was so intense, and it was such a shock that my whole body was just shaking, like I couldn't stop trembling afterwards. And I could barely get any words out...like I that had tears in my eyes and I was just completely shocked. Like I just didn't even know what to do or think or say. Yeah, it was quite horrible.

Dark green – attempts at managing own distress

Yellow – clinicians communication during procedure

Pink – clinician pain management techniques

Grey - lack of pain relief options offered

Green – new pain experience that is difficult to compare

Red- shock reaction to pain

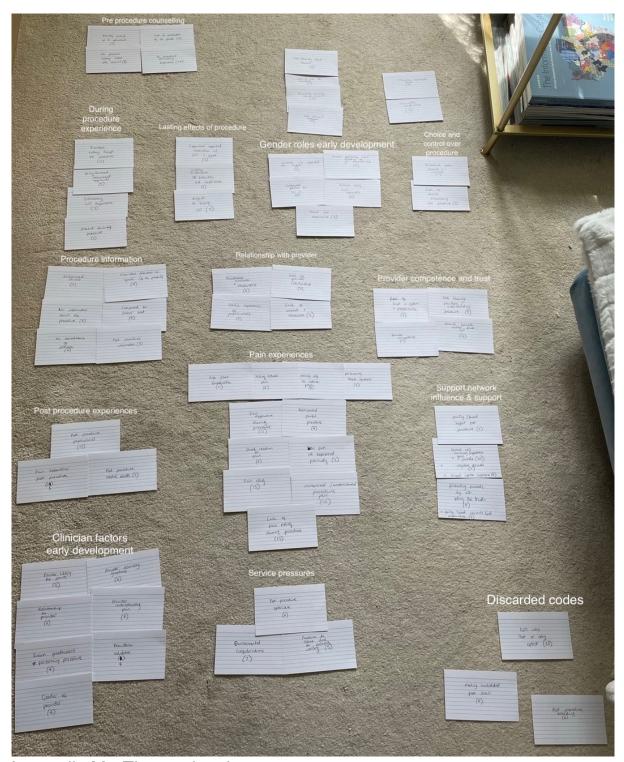
Blue – need to validate pain experience

Dark blue - vulnerability and disbelief

Purple – Attempts to use own professional knowledge to scaffold experience

Appendix L – Initial theme progression

This showed initial themes being created from codes, these were then developed further into analytical themes and split up according to meaning and patterns that developed as the analysis process progressed.



Appendix M - Theme development

This shows the development of the clinician skills theme. Subtheme 3 was changed to autonomy and vulnerability as this moved from a descriptive to an analytical theme. Similarly, the subtext and meaning from subtheme five was about conveying pain experience rather

than just the skills of clinicians which was seen as another descriptive to analytical development of the theme.

Overarching theme 1 Clinician skills and communication	Subtheme 1- "It felt like I was on the list of things to do that day": a need for warmth in a busy clinical environment	- "I of people should specify more of well it": p	uld cialise in orethey d to be versed in erceived	Subther 3 – "I ca relax because don't rea know wl you're doing": clinician talking through the procedu	in't e I ally hat	Subtheme 4: - Relationship to clinician	Subtheme 5: "It was quite painful and I was told it was gonna be uncomfortable": underestimating and dismissing experiences
Overarching theme 1 Clinician interpersonal skills	Subtheme 1- "It felt like I was on the list of things to do that day": personalised care in a clinical environment		"I think just " acknowledgment ra would have been o		" th rap	Subtheme 3 – " there was no trying to build a rapportnothing to make me sort of feel comfortable": relationship to clinician	