Barriers and Misperceptions Limiting Widespread Use of Intrauterine Contraception Among Canadian Women

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Abstract

Unintended pregnancy is a major social and public health problem with adverse effects on neonatal and developmental outcomes, as well as maternal health and wellbeing. Traditionally, family planning policies have focused on increasing contraceptive uptake in non-users; however, rates of non-use are low in many developed nations. A high proportion of unintended pregnancies are attributable to contraceptive failure, particularly when using barrier and short-acting hormonal contraceptives. Intrauterine contraceptive devices (IUCDs) are highly effective and have been shown to reduce unintended pregnancy rates. Despite this, global utilization rates are low, and IUCD uptake in Canada has been particularly low. In this review we explore why IUCDs are not more widely used, and specifically focus on barriers and misperceptions that may influence IUCD uptake, particularly in Canada. We reviewed relevant articles published in English between 1990 and 2014, through searches of PubMed and Medline, including primary studies of any design containing information on the knowledge and attitudes of health care providers and women. Providing education to care providers, women, and policy makers may help overcome misperceptions about the use of IUCDs, and may facilitate greater use. Increased support from federal and provincial health programs may also encourage the use of IUCDs in Canadian women, and help to reduce unintended pregnancy rates.

Résumé

Important problème social et de santé publique, les grossesses non souhaitées exercent des effets indésirables sur les issues néonatales et développementales, ainsi que sur la santé et le bien-être de la mère. Traditionnellement, les politiques de planification familiale ont eu pour objectif principal d'accroître la mesure dans laquelle la contraception en vient à être adoptée par les non-utilisatrices; cependant, les taux de non-utilisation sont faibles dans de nombreux pays développés. Les grossesses non souhaitées sont, dans une importante proportion, attribuables à l'échec de la contraception (particulièrement dans les cas où des méthodes de barrière et des contraceptifs hormonaux à action brève ont été utilisés). Les dispositifs intra-utérins (DIU) sont grandement efficaces et leur capacité de réduire les taux de grossesse non souhaitée a été démontrée. Les taux mondiaux d'utilisation des DIU demeurent néanmoins faibles et leur adoption par les Canadiennes s'est avérée particulièrement lente. Dans cette analyse, nous explorons les raisons pour lesquelles les DIU ne sont pas plus vastement utilisés, en nous centrant principalement sur les obstacles et les perceptions erronées qui pourraient influencer l'adoption des DIU, particulièrement au Canada. Nous avons passé en revue les articles pertinents qui ont été publiés en anglais entre 1990 et 2014 (identifiés par l'intermédiaire de recherches menées dans PubMed et Medline), y compris les études primaires (tous devis confondus) contenant des renseignements sur les connaissances et les attitudes des fournisseurs de soins de santé et des femmes. L'offre d'outils pédagogiques aux fournisseurs de soins, aux femmes et aux décideurs pourrait contribuer à l'élimination des perceptions erronées quant à l'utilisation des DIU et à en accroître l'adoption. L'obtention d'un soutien accru de la part des programmes fédéraux et provinciaux de santé pourrait également inciter les Canadiennes à avoir recours aux DIU et contribuer à la baisse des taux de grossesse non souhaitée.

Key Words: Contraception, intrauterine device, intrauterine system, long-acting reversible contraception, unintended pregnancy

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INTRODUCTION

A

Despite the wide range of contraceptive methods available, it is estimated that up to 51% of all pregnancies in Canada and the United States are unintended.[1] Unintended pregnancy is a major social and public health problem because it adversely affects neonatal and developmental outcomes and can affect maternal behaviour, health, and economic well-being. When unintended pregnancies result in live births, infants are more likely to be delivered preterm and with a low birth weight,[2] and mothers are more likely to report postpartum depression.[3] In the United States, unintended pregnancies and unintended births occur disproportionately among younger, unmarried, and low-income women.[4–8] These women may suffer the most financial hardship as a result of having an unplanned child, and their unintended pregnancy is likely to have a detrimental effect on their education (in turn, possibly reducing future career opportunities and longer-term financial stability).[9]

The societal costs of unintended pregnancies in Canada are difficult to ascertain. In one study conducted in Ontario, which used a clinical model to determine the costs of early induced abortion, the health care costs were estimated to range from $518.77 to $842.63 for an individual procedure. However, this model did not include indirect costs such as absence from work.[10] The most significant societal costs associated with unintended pregnancy are likely to relate to child-rearing, with estimated direct costs to families ranging from $4 billion to $15 billion per year.[11–13]

Historically, family planning strategies have focused on reducing the rate of contraceptive non-use. However, rates of non-use are already at low levels in many developed nations, and in Canada the prevalence of contraception is approximately 74%.[14] Furthermore, a high proportion of unintended pregnancies occur while women are using some form of contraception. Although an estimate has not been reported for Canada, the proportion of unintended pregnancies related to contraceptive failure is approximately 50% in the United States and 65% in France, where contraceptive uptake is higher.[15,16] For these reasons, a new emphasis is being placed on optimizing contraceptive decision-making through selection of the most effective methods. Contraceptive failure is common among users of short-acting reversible contraception such as oral contraceptives, contraceptive patches, contraceptive rings, barrier methods, and spermicides. In a review of contraceptive failure in the United States, oral contraceptives, contraceptive patches, and the vaginal contraceptive ring were associated with a 9% failure rate within the first year of typical use.[17]

B

Furthermore, because of the dependence on user compliance, nearly all initiatives aimed at improving uptake and adherence with short-acting reversible contraception methods have had limited success in consistently reducing unintended pregnancy.[18,19] This highlights the need for alternative contraceptive strategies that are not dependent on adherence. Another potential strategy to reduce unintended pregnancy is to increase women's access to emergency contraception. However, although results from a systematic review indicated that increased access to emergency contraceptive pills was associated with greater use, no studies identified a reduction in unintended pregnancy rates.[20]

For the purposes of this review, long-acting reversible contraception is defined as a contraceptive method that requires administration less than once per year. Such methods include implants (which are not currently available in Canada) and intrauterine contraceptive devices (i.e., the copper intrauterine device and the levonorgestrel intrauterine system). Because LARC methods are intrinsically highly effective and do not depend on user compliance, more widespread use of LARC would reduce unintended pregnancy rates.[17,21] Both the American College of Obstetricians and Gynecologists and the Royal College of Obstetricians and Gynaecologists advocate the use of LARC methods for most women.[22,23] Guidelines from the Society of Obstetricians and Gynaecologists of Canada are currently under revision (personal communication, C. Green, 29 May 2015).

According to recent global data from the United Nations, 13.9% of women who are married or in a union and of reproductive age (15 to 49 years) use intrauterine contraceptive methods. However, in Canada, the corresponding percentage is much lower (1.0%).[14] In a survey of Canadian women aged 15 to 50 years, the overall rate of IUCD use was 2.3%. Rates of IUCD use were found to be particularly low in certain groups, such as young women (aged < 20 years) and single women (0.5% and 2.3%, respectively).[24] This is despite the World Health Organization Medical Eligibility Criteria for contraceptive use[25] and other evidence-based guidelines[21,26–28] supporting

ABBREVIATIONS

Cu-IUD	copper intrauterine device
HCP	health care provider
IUCD	intrauterine contraceptive devices
LARC	long-acting reversible contraception
LNG-IUS	levonorgestrel intrauterine system
PID	pelvic inflammatory disease
WHO MEC	World Health Organization Medical Eligibility Criteria

IUCD use in women regardless of age or parity. The SOGC guidelines on minimizing infection associated with IUCDs recommend that they may be used as a first-line option in adolescents.[29]

Our objective was to identify barriers and misperceptions that limit the more widespread use of IUCDs, with a particular emphasis on concerns in Canada. Although we focus specifically on barriers to the use of IUCDs in nulliparous women, many of these barriers apply to the use of IUCDs in all women, regardless of parity.

METHODS

We used results from a previous literature review,[30] conducted using PubMed and Medline, to search the literature for primary studies of any design that examined the knowledge and attitudes of health care providers and women regarding IUCD use and that was published in English between 1990 and 2012; searches using similar criteria identified relevant additional papers published in English between 2012 and 2014, and papers published in English between 1990 and 2014 that reported Canadian data. Specifically, we sought to understand the barriers at the level of care provider, user, and health system that influence rates of IUCD use. "Misperceptions" were identified as such when primary literature or guidelines refuted the claim or when evidence was inconsistent. Misperceptions were classified as "concerns" when HCPs identified barriers related to uncommon (less than 1%), rare (less than 0.1%), or very rare (0.01%) risks.

In addition, we report a recent subgroup analysis of data from a published global online survey of care providers.[31]

RESULTS

Various barriers at care provider, user, and health system levels that may limit the more widespread use of IUCDs were identified (Figure 1). These barriers are often interlinked (Figure 2).

Health Care Provider Barriers

The concerns of care providers about the use of IUCDs in nulliparous women are key barriers to their more widespread use.[30] A global online survey of 1862 experienced contraception providers from 15 countries (Canada [n = 100], European countries [n = 1003], Latin American countries [n = 402], Australia [n = 201], and the United States [n = 156]) was conducted regarding IUCD insertion.[32] Samples in each country were representative of the types of clinicians who provided contraceptive services; experienced care providers were defined as those who saw ≥ 20 women per month for contraception. When respondents were asked to select (from an extensive list) their three main barriers when considering IUCDs for nulliparous women, the most frequent responses were concerns about pelvic inflammatory disease, infertility, difficult insertion, and insertion-related pain.[32] Respondents with ≤ 10 years' experience were less likely than others to report concerns about PID ($P < 0.001$) and infertility ($P = 0.007$). Midwives/nurses were less frequently concerned than obstetrician-gynaecologists and family physicians about PID ($P < 0.001$), infertility ($P < 0.001$), and difficult insertion ($P = 0.006$).[32]

The overall frequency with which respondents reported concerns about difficult IUCD insertion or insertion pain as one of their three main barriers was similar regardless of their length of time in practice. The frequency with which respondents reported concern about insertion pain as one of their three main barriers was similar for obstetrician-gynaecologists, family physicians, and midwives/nurses.[32]

Further misperceptions about IUCD use included the belief that nulliparous women have a higher risk of uterine perforation than parous women (reported by 43.2% of respondents in the global cohort) and the belief that nulliparous women are more likely to expel their device than parous women (reported by 36.5% of respondents in the global cohort).[32] In reality, the most significant risk factors for uterine perforation from IUCDs are breastfeeding and postpartum insertion.[33] In an European study of over 61 000 IUCD insertions, 43% of the 81 perforations occurred in breastfeeding women.[33] Studies conflict as to whether nulliparity increases risk of perforation.[34–37] In the US Contraceptive CHOICE project (a study evaluating widespread LARC uptake), 36-month expulsion rates were higher in parous women (11.4% vs. 8.4%) and adolescents, regardless of parity.[38]

Knowledge of the WHO MEC[25] for contraceptive use was poor, with approximately only one half of respondents (46.8% to 57.7% across geographical regions) being aware that the use of IUCDs in nulliparous women had a category 2 recommendation ("benefits outweigh the risks").[32] Obstetrician-gynaecologists and nurses were more likely than family physicians to have correct knowledge of the WHO MEC[25] ($P < 0.001$).[32]

The barriers perceived by Canadian respondents in this survey are summarized in Figure 3. The four most frequent responses were concerns about difficult insertion, PID, infertility, and insertion pain.[31] Most of the barriers were not evidence based (Table 1).

Figure 1. Overview of the factors that may influence the prevalence of IUCD use

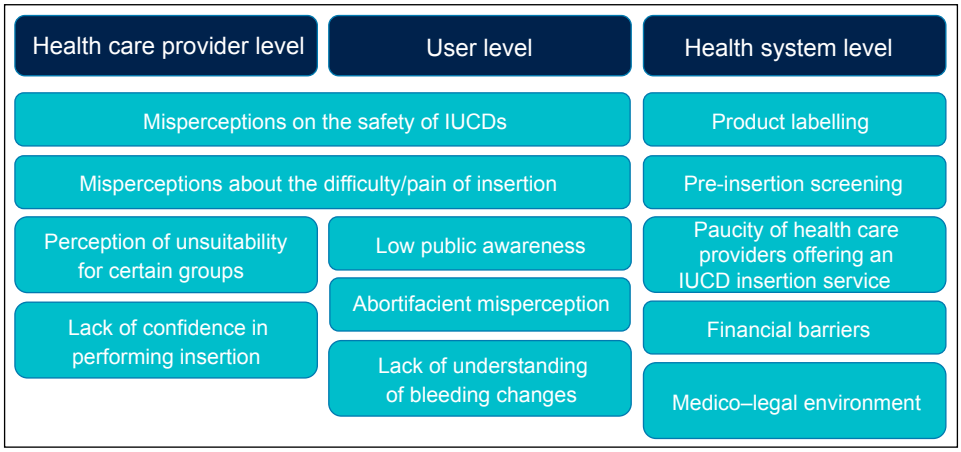
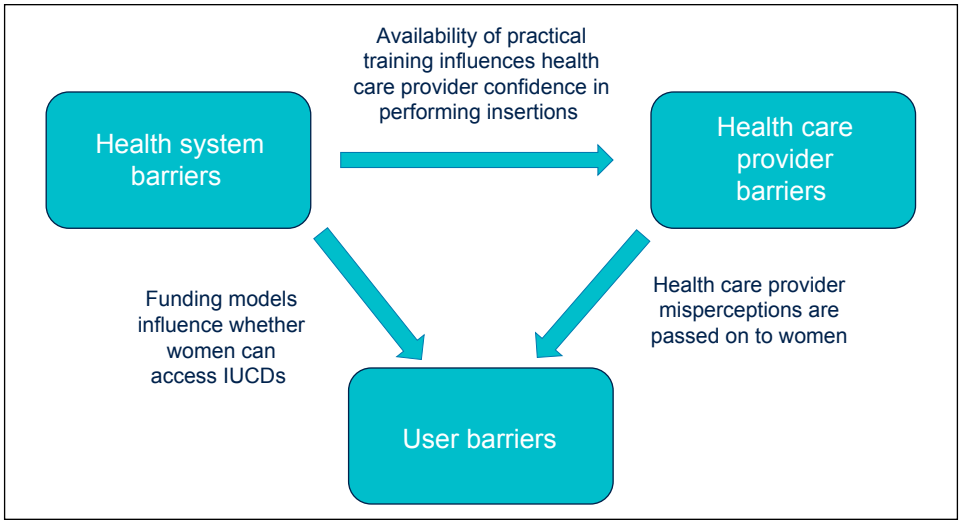


Figure 2. Health system, health care provider, and user barriers are interlinked

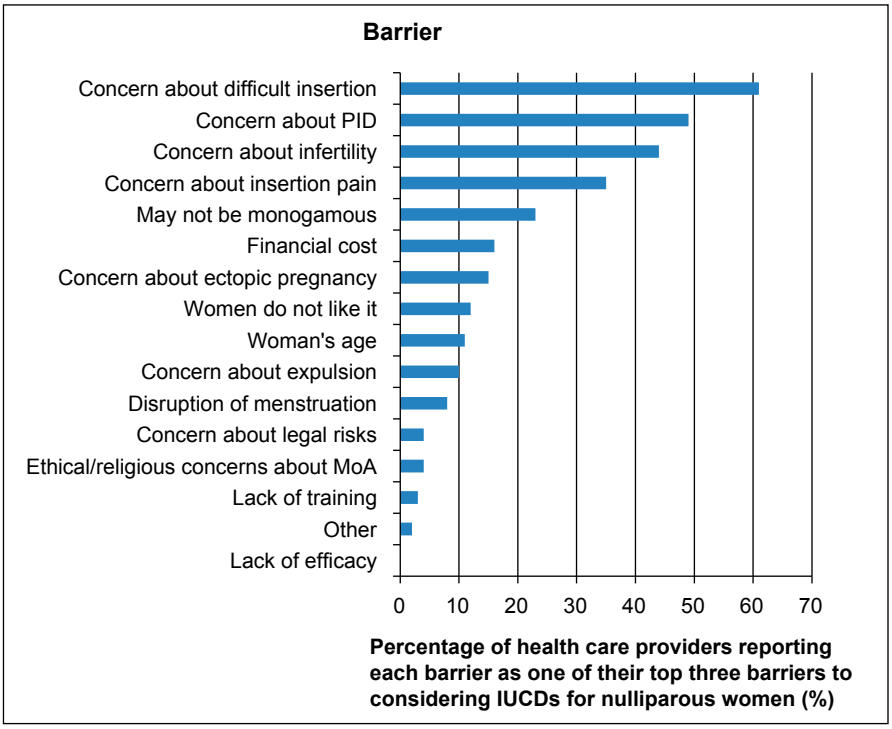


When Canadian respondents were questioned in more detail about their perceptions of IUCD insertion, 27% and 19% reported the misperception that IUCD insertion is "much more difficult" and "much more painful," respectively, in nulliparous women than in parous women.[31] However, in a study of IUCD insertion in 117 nulliparous women, 87% of insertions were reported by clinicians as "easier than expected" or "as expected."[39] In this same study, 78% of 113 women for whom insertion was successful reported that insertion was "less painful" or "as expected."[39] Similar to global respondents, significant numbers of Canadian HCPs reported that nulliparous women have a higher risk of uterine perforation (38% of respondents) and a higher risk of expelling their device than parous women (34% of respondents).[31] Less than one half of the Canadian respondents (47%) knew that use of an IUCD in nulliparous women had a WHO MEC[25] category 2 recommendation (advantages generally outweigh the known or theoretical risks) for contraceptive use, whereas 10% and 1% incorrectly believed that IUCDs for nulliparous women had a category 3 (risks generally outweigh the advantages) or category 4 (contraindication) recommendation, respectively. In addition, 35% of respondents reported that they "did not know" how nulliparity was categorized in the WHO MEC. Overall, 13% of Canadian respondents surveyed reported that they never include IUCDs in contraceptive counselling for a nulliparous woman, regardless of her age.[31]

User Barriers

Many factors influence a woman's choice of contraception; lack of public awareness of IUCDs and women's misperceptions about the safety of IUCDs and their lack of suitability for

Figure 3. Responses from 100 experienced Canadian health care providers to the question, "What are your three main barriers to considering IUCDs for nulliparous women?"[31]



MoA: mechanism of action

Table 1. Concerns and misperceptions about IUCDs versus the scientific evidence

Concern/misperception	Scientific evidence
IUCDs cause PID	PID following IUCD insertion is rare, at 0.54%, and decreases after the first 21 days of insertion.[47] The mechanism of PID is believed to be ascension of pre-existing lower genital tract infections, and not the IUCD itself.[47,48]
IUCDs may impair future fertility	Past or recent use of an IUCD is not a risk factor for infertility.[49]
IUCDs increase the risk of ectopic pregnancy	The absolute risk of ectopic pregnancy is lower among IUCD users than among women not using contraception. However, the proportion of pregnancies that are ectopic is high among women who become pregnant with an IUCD in situ, and must be immediately ruled out if pregnancy is noted.[50,75]
IUCDs are only suitable for older, parous women	The insertion failure rate is extremely low in nulliparous women, and in most cases, the insertion procedure is straightforward from the clinician's perspective.[76]
	The risk of uterine perforation in nulliparous women is low,[39,44,77] as is the risk of expulsion.[39,44,77,78]
	Risk of PID and resultant infertility is related to STIs, not parity.[49,79–87]
	IUCDs are highly effective in nulliparous women.[39,83,88,89]
IUCD methods are abortifacients	An abortifacient is a drug or device used to induce an abortion, usually of an implanted embryo. IUCD methods act primarily by preventing fertilization in multiple steps. Cu-IUDs release copper ions into the uterus and cervical mucus, exerting effect via toxicity to sperm (directly and to the acrosome reaction), oocytes, and through impaired tubal motility, all of which occurs before fertilization and implantation.[53,55,57,90]
LNG-IUSs release levonorgestrel, thickening the cervical mucus and suppressing endometrial proliferation, thus preventing fertilization and implantation.[53,55,56]	

Table 2. Responses from 100 Canadian care providers asked to select their top three options that would "best increase your knowledge and confidence in IUCDs for nulliparous women"[67,68]

Response	Respondents %
More presentations at local meetings	44
More social acceptance of IUCDs	29
Articles in professional magazines and newspapers	28
More requests for IUCDs from nulliparous women	27
More information from manufacturers of products	23
Specific practical training on insertion	23
More presentations at national conferences	22
Changes in local guidelines	18
More presentations at international conferences	14
Nothing would increase my confidence in using IUCDs in nulliparous women	11
Other	1

certain groups may prevent their more widespread use. In addition, women may be more likely to use contraceptive methods that their family members or friends have used.[40]

Lack of awareness of IUCDs

Care providers may not present all contraceptive options to patients. A qualitative analysis of 50 family planning consultations at six clinics (a combination of family planning, primary care, and general gynaecology clinics) in San Francisco found that in nearly one half of consultations, physicians reviewed only 2.2 (range 1 to 5) contraceptive methods with their patients.[41] Consequently, women need to be aware of IUCDs in order to request them from their care provider. The level of awareness of IUCDs among young women appears to be low.[42] For example, in a study of 252 women aged 14 to 27 years presenting to a family planning clinic in San Francisco, 55% had not heard of IUCDs.[43]

Concerns about the safety and efficacy of IUCDs

In an online survey conducted in Canada and nine European countries in young women (aged 20 to 30 years) who had heard of Cu-IUDs (n = 1607) and "hormonal IUSs" (n = 1111), respectively, women reported the following concerns: that they may cause pelvic infections (29% and 19%), that they may lead to infertility (18% and 12%), that they may cause ectopic pregnancy (26% and 19%), or that they may cause weight gain (9% and 31%).[44] Furthermore, in a survey of 1665 women of reproductive age in St Louis, MO,[45] 11% to 36% of respondents had the concerns that use of IUCDs was associated with complications such as infection, infertility, and cancer. Over one half (61%) of women in this survey underestimated the effectiveness of IUCDs, and only 46% believed that IUCDs were suitable for nulliparous women.[45]

Infection attributed to IUCD insertion is often due to pre-existing lower genital infection, as evidenced by an increased risk of PID in the first 20 days of insertion.[46] The risk of PID following IUCD insertion is rare, at 0.54% in the first 90 days.[47] Even when the patient has asymptomatic chlamydial infection, risk of PID is 0% to 5%.[48] IUCD use is not associated with infertility.[49] Ectopic pregnancy risk (expressed as ectopic pregnancies per woman-years) is lower in IUCD users than non-users, although the proportion of ectopic pregnancies is higher in IUCD users than in non-users.[50]

Concerns about the mechanism of action of IUCDs

Some women believe that because IUCDs are inserted into the uterus, they must work by inducing abortion.[51] As a result, many women may disregard IUCDs as an option.[30] Worryingly, this concern that the contraceptive mechanism of IUCDs is that of an abortifacient may also be shared by some care providers.[30] The main mechanism of action of LNG-IUS is thickening of cervical mucus, and ovulation is impaired in many users.[46,52] The main mechanism of action of Cu-IUDs is impaired sperm motility, transport, acrosomal reaction, and accelerated apoptosis of sperm and oocytes.[53–55] In vitro studies show accelerated apoptosis of embryos when they are exposed to copper ions; however there is no evidence to demonstrate that this is the case in vivo.[55] Tubal flushing studies also show that fewer oocytes are recovered in Cu-IUD users than in non-users.[55] Care providers must be well informed about contraceptive mechanisms of action as well as statements by the American College of Obstetricians and Gynecologists [56] and the Royal College of Obstetricians and Gynaecologists[57] that IUCDs are not abortifacients (Table 1).

Misperceptions regarding difficulty and pain of IUCD insertion

Fear of pain during insertion may dissuade women from choosing an IUCD as their method of contraception,[58] and care providers may pass on their own concerns regarding difficulty and pain of insertion to women seeking contraception. In fact, the anticipated difficulty and pain is often greater than what is actually experienced during IUCD insertion. In a global phase III study of 2884 women who had an LNG-IUS inserted; investigators evaluated insertion as "easy" in 89.6% of women, and 92.4% of women rated the pain experienced during insertion as no more than "moderate."[59]

Lack of understanding of bleeding changes

Results of an online survey of women aged 20 to 30 years in Canada and Europe found that 47% of women believed that "skipping periods is not healthy for a woman's body" and 32% believed that "irregular periods are not healthy for a woman's body."[44] Cultural attitudes towards changes in menstrual bleeding may also deter certain groups of women from considering IUCDs. In our practices, we observe that some women view menses as reassurance that they are not pregnant. Fear of amenorrhea should not preclude use of IUCD: a Cu-IUD (which does not cause amenorrhea) or a lower-dose LNG-IUS (with an amenorrhea rate of 11.6%)[46] may be an acceptable option.

Barriers to IUCD use at the Health System Level

Product labelling

IUCD product labels may be based on outdated information that can lead to unnecessary restrictions on their use. In Canada, the product monograph for the LNG-IUS Mirena (Bayer Inc., Mississauga ON) states that it is not the first-choice contraceptive method of young, nulligravid women.[52] This labelling is based on the fact that initial studies of the device were conducted in multiparous women, and not because there is evidence of harm. The monograph for the LNG-IUS Jaydess (Bayer Inc., Mississauga ON) does not contain such a warning.[46] However, discrepancies in labelling may dissuade clinicians from placing IUCDs in nulliparous women, or may lead to uncertainty regarding their suitability for this group.

Cervical screening guidelines

Cervical screening is not required for providing contraception according to the WHO Selected Practice Recommendations for contraceptive use.[60] In all Canadian provinces and territories, cervical screening programs are being changed to optimize screening intervals. Pap screening is now largely performed biennially or triennially for average-risk patients.[61] Withholding the provision of IUCDs because of lack of cervical screening is not evidence-based, and there is no evidence that IUCDs increase the risk of developing cervical cancer. Furthermore, a pooled analysis of epidemiological data suggested that the use of IUCDs may protect against the development of cervical cancer.[62]

Sexually transmitted infection screening requirements

In Canada, a negative STI result is not required before insertion of an IUCD. The SOGC guidelines recommend that women requesting an IUCD be stratified for the risk of STIs (by history and physical examination), and that women at increased risk should be tested before or at the time of insertion; however, it is not necessary to delay insertion until results are reported.[29] If the STI screen is positive, the infection can be treated with the IUCD in situ. When treating mild-to-moderate pelvic infection in women with an IUCD in situ, it is not necessary to remove the IUCD unless the patient requests removal or unless there is no clinical improvement after 72 hours of antibiotic therapy. In the event of severe pelvic infection, care providers can consider removing the IUCD after antibiotic therapy has been initiated.[29]

Financial barriers

Costs related to IUCDs and their insertion may limit use for some women. In addition, extended health benefits may not cover any or all contraceptive methods. In our clinical practice, we see this frequently. For example, the drug benefit plan for undergraduate students at McMaster University does not cover contraception.[63] The Public Service Health Care Plan for federal employees only covers oral contraception, not IUCDs.[64] In addition, the Cu-IUD is classified as a medical device, and it may not be covered under a drug benefit plan. Of note, use of both the LNG-IUS and the Cu-IUD is covered under the Non-Insured Health Benefit for First Nations and Inuit women.[29,65]

DISCUSSION

The barriers limiting the use of IUCD methods of contraception in Canada should be addressed, as follows.

Care providers

The results of the global survey by the INTRA group[32] highlight a number of misperceptions on the part of care providers that should be addressed through targeted educational programs. Overall, there is a worrying lack of awareness of the WHO MEC[25] guidance advocating the use of IUCDs in nulliparous women, and further education is required to ensure that care providers understand that, as a "MEC-2" classification, the advantages of IUCDs may

outweigh the potential risks. All newly qualified physicians should have full knowledge of the benefits and risks associated with all contraceptive options, including IUCDs. The variable focus in current medical undergraduate curricula was demonstrated in a survey of medical students in 122 medical schools in Canada and the United States, which evaluated the inclusion of sexual and reproductive health topics within the curriculum. The results showed that although pregnancy and STI topics had coverage of 97% to 100% and 99% to 100%, respectively, the coverage of contraceptive methods and elective abortion procedures showed great variation by subtopic and geographic regions (69% to 96% and 24% to 67%, respectively).[66] Education on IUCDs is also required for care providers who qualified without completing training in contraception. Additionally, practical training in IUCD insertion techniques needs to be made more widely available to increase confidence in offering IUCD insertion, particularly to nulliparous women.

The responses of Canadian care providers in the INTRA group survey,[32] when asked what they would recommend to increase their knowledge of and confidence in IUCD use in nulliparous women,[67,68] are shown in Table 2.

Users

In Canada, sexual health websites aimed in part at educating women on contraceptive methods may help increase women's knowledge of IUCDs, provided women are directed to these useful resources. Providing effective contraceptive counselling for women requesting contraception can increase awareness of different methods and address any misperceptions. Women in the United States who were informed about IUCD options by their care providers were 2.7 times more likely to be interested in using these methods than women who had either heard about IUCDs from other sources or who had not heard of IUCDs before.[43] The CHOICE study demonstrated that when women were given full information about all available contraceptive methods, and then made a choice of contraceptive method (provided free of charge), most women (> 50%) chose an IUCD.[69] For contraceptive counselling to be effective, all contraceptive options should be explored, including a full discussion of the benefits and risks of each method. The conversation should start with the most effective methods: LARC, including IUCDs, should be discussed as first-line options. Women should be reassured that several national and international women's health organizations, including the American College of Obstetricians and Gynecologists, the Royal College of Obstetricians and Gynaecologists, and the Association of Reproductive Health Professionals have concluded that IUCDs are not abortifacients, and that evidence has failed to demonstrate, in vivo, that IUCDs function by causing abortions.[56,57,70] As well as overcoming women's misperceptions regarding the safety of IUCDs, perceptions regarding bleeding patterns during IUCD use also must be addressed. The perception that absent, irregular, or heavy bleeding while using contraception could be unhealthy may cause women to disregard IUCDs as a contraceptive option. Women need to be aware that Cu-IUDs are generally associated with longer and heavier menstrual bleeding,[54] that LNG-IUSs are often associated with lighter or less frequent bleeding or amenorrhea,[46,52] and that this is more pronounced with the higher dose LNG-IUS (Mirena) than with the lower-dose LNG-IUS (Jaydess).[71] Counselling may help to address misunderstandings of bleeding changes or fear of amenorrhea. In the CHOICE study, 67% of women who received detailed counselling on contraceptive options chose to use LARC; of these, 47% chose an LNG-IUS.[72]

Health Care Systems

To ensure that sufficient experienced care providers are available for IUCD insertion, incentives are needed to encourage clinicians who are experts in insertion techniques to offer practical training for less experienced colleagues. Incentives should also encourage IUCD-insertion novices to seek practical training to ensure that they are sufficiently skilled in insertion techniques. However, patients may be reluctant to participate in the training process, which may create a potential barrier in this respect. Pelvic models or training aids, such as videos, can also be used to improve insertion techniques.

The financial barriers that limit women's access to IUCDs need to be addressed. For health plans to consider reimbursing the costs associated with intrauterine methods, robust cost-effectiveness data are required. In a United States study, IUCDs were shown to be the most cost-effective reversible contraceptive method.[73] Canadian data are needed to assert the relative cost-effectiveness of LARC methods.

Guidelines, such as those developed by the SOGC, can help address issues related to access to IUCD insertion services.[74]

CONCLUSION

Traditional family planning strategies have focused on increasing contraceptive uptake among non-users. However, one half of unintended pregnancies occur as a result of contraceptive failure, highlighting the need for more widespread uptake of the most effective methods. In Canada, the IUCD is the only LARC method currently available.

Increasing the use of IUCDs, particularly in younger women, will require efforts from individual women, their care providers, and policymakers. Education of care providers and coverage of IUCD-related costs by health plans are key to increasing LARC uptake in Canadian women.

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