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

Brian Hauck, MD, FRCSC,[1] Dustin Costescu, MD, BSc, FRCSC[2]

[1]Department of Obstetrics and Gynaecology, Foothills Medical Centre, Calgary AB

[2]Department of Obstetrics and Gynaecology, McMaster University, Hamilton ON

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

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]

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