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Understanding the barriers and myths limiting the use of intrauterine contraception in nulliparous women: results of a survey of European/Canadian healthcare providers

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ABSTRACT

Objectives: To evaluate healthcare providers' (HCPs') knowledge, attitudes and beliefs regarding intrauterine contraception (IUC).
Study design: HCPs in eight European countries and Canada who saw at least 20 women per month for contraception completed an online questionnaire. Responses were evaluated by country.
Results: In total, 1103 HCPs completed the survey: 633 obstetrician-gynecologists, 335 general practitioners and 135 family planning clinicians (physician, midwife or nurse). When respondents in different countries were asked to report their three main barriers to considering IUC, predominant concerns were nulliparity (34–69%) and pelvic inflammatory disease (PID; 14–83%) for women in general, and insertion difficulty (25–83%), PID (17–83%), insertion pain (7–60%) and infertility (6–55%) for nulliparous women. In addition, 4–59% of HCPs reported that they never proactively include IUC in contraceptive counseling for a nulliparous woman, regardless of her age. Furthermore, only 30–61% of respondents correctly identified that, in the World Health Organization medical eligibility criteria for IUC, nulliparity is category 2 (benefits outweigh risks).
Conclusions: HCPs in Europe and Canada have clear gaps in their knowledge regarding IUC and misplaced concerns persist, particularly regarding use of IUC in nulliparous women; the predominant misconceptions are about PID, insertion difficulty and insertion pain. Further education on the evidence is needed so that IUC is recognized as being suitable for young and nulliparous women and is included in contraceptive counseling.

Introduction

Unintended pregnancy remains a global public health problem. Worldwide, 41% of all pregnancies are unintended. However, the percentages of pregnancies that are unintended vary geographically; 38%, 39%, 44%, 48% and 58% in Asia, Africa, Europe and North America (US and Canada combined) and Latin America/Caribbean, respectively. Within Europe, the percentages of pregnancies that are unintended range from 39% in Southern Europe to 48% in Eastern Europe [1]. Up to 50% of unintended pregnancies can be attributed to contraceptive failure or non-compliance [2]. Non-compliance is one of the major reasons for contraceptive failure, particularly in adolescents. In addition, rates of unintended pregnancy are highest among younger women [2]. Long-acting reversible contraception (LARC), including intrauterine contraception (IUC), is highly effective and is not dependent on user compliance [3].

The more widespread use of LARC might therefore be expected to reduce unintended pregnancy rates. The Contraceptive CHOICE project in the US has shown that the use of LARC, including IUC, can be increased via good contraceptive counseling. When women were given structured counseling on the benefits and risks of all reversible methods, including LARC, and then given a choice of any method provided free of charge, 75% of women chose LARC (IUC or implant) and 58% chose IUC (levonorgestrel intrauterine system [LNG-IUS] or copper intrauterine device) [4]. Additionally, women

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who chose IUC had the highest 2-year continuation rates [5] and the highest user satisfaction [6]. Furthermore, the unintended pregnancy rate among LARC users was 10-fold lower than among women using short-acting hormonal methods [7] and the induced abortion rate in the CHOICE cohort (which included a high proportion of LARC users) was substantially lower than the regional (St. Louis) abortion rate [4].

Despite the fact that international and national guidelines support the use of IUC in a wide range of women, regardless of age and parity status [8–12], various barriers and misperceptions persist that limit its more widespread use [13]. For example, a cross sectional survey of obstetricians and gynecologists in the St. Louis region demonstrated that several misperceptions persist concerning the safety of IUC, particularly the misperception that IUC causes pelvic inflammatory disease [14]. The extent to which these barriers and misconceptions persist in different countries may explain the wide variation in utilization rates between countries [15]. The wider acceptance and use of the LNG-IUS in Scandinavia may be because the initial studies with the LNG-IUS were conducted in Finland.

We conducted an online survey to gain a greater understanding of the various barriers and misperceptions about IUC that persist among providers of contraception, especially regarding use in nulliparous women, and to identify initiatives to improve providers' knowledge of IUC and eliminate barriers to use so that IUC methods are included in contraceptive counseling. The results from the overall cohort (providers from 15 countries across 4 regions) have been published [16]. Here, we report a subgroup analysis of the responses from providers of contraception in Europe and Canada.

Materials and methods

An online survey of providers of contraception in Canada, France, Germany, Ireland, The Netherlands, Russia, Sweden, Turkey and the UK was conducted between February and March 2012. The questionnaire was developed by the INTRA (Intrauterine Contraception for Nulliparous Women: Translating Research into Action) group, an international advisory group of 10 physicians. The logistics of distributing and administering the survey were undertaken by GfK, a global market research organization, with funding from Bayer HealthCare. The questionnaire was translated into the languages of each of the countries by native speakers; each local language version was tested for comprehension before roll-out. In each country, HCPs were identified from existing nursing and medical market research panels of healthcare professionals who had expressed an interest in participating in research. These panels were created by the market research company 'World One'. Individuals were selected from these panels by random sampling; those selected were sent an email invite to participate. HCPs who were willing to participate answered screening questions, which sought to exclude individuals with a relationship to any pharmaceutical company and ensure that respondents who went on to complete the survey saw at least 20 women per month for contraceptive counseling. Additionally, screening ensured that respondents were one of the following types of HCP: an obstetrician–gynecologist (OB–GYN), a general practitioner (GP) or a family planning clinician (FPC; a physician, midwife or nurse with a specific women's health qualification).

The types of HCP who provide contraceptive services vary between countries. For example, in Germany, contraceptive services are provided exclusively by gynecologists, whereas in other countries, a wider range of HCPs are active in the provision of contraception. Therefore, it was important that, for each country, the respondent samples were representative of the types of HCP who provide contraception services. The relative percentages of different types of HCP who provide contraception in individual countries were determined through collaborative discussions between the INTRA group physicians, expert physicians from the relevant countries and representatives from Bayer HealthCare in individual countries. Accordingly, recruitment quotas for different HCP types were set for individual countries (Table 2 footnote). Respondents fulfilling the screening criteria progressed to a structured questionnaire (Table 1).

Results

Response rates

Response rates in individual countries were as follows: Canada, 15%; Germany, 19%; France, 21%; UK, 29%; Russia, 28%; Sweden, 15%; The Netherlands, 13%; Turkey, 20%; Ireland, 15%. These percentages reflect the number of HCPs who responded to the email invite, passed screening and then went on to complete the main questionnaire, with the total number of HCPs sent an email invite as the denominator.

Respondent characteristics

A total of 1103 respondents completed the survey, of which 633 were OB–GYNs, 335 were GPs and 135 were FPCs. Further details are shown in Tables 2 and 3. The mean number of devices inserted per month ranged from 7.7 for respondents in Russia to 23.4 for respondents in France.

Barriers to use of intrauterine contraception in general

Respondents were asked to report their three main barriers to considering IUC for women in general (i.e. respondents were asked to report their own barriers, not what they thought were the main barriers for other HCPs in their country) (Fig. 1). The two most frequently reported barriers, by country, were as follows: nulliparity and concerns about pelvic inflammatory disease (PID) in Canada, France, Russia and Turkey; disruption of normal menstruation and concerns about insertion-related pain in Sweden; nulliparity and financial cost in Germany; concerns about insertion difficulty and nulliparity in the UK and Ireland; concerns about insertion-related pain and nulliparity in The Netherlands (Fig. 1).

The impact of IUC on menstruation was frequently reported as a barrier by respondents in Turkey and Sweden, but was less frequently of concern in Canada, The Netherlands and Ireland (Fig. 1). In Russia, concerns about nulliparity and PID were particularly prevalent whereas concerns about insertion-related pain and insertion difficulty were less prevalent in Russia than in other countries. In addition, concern about non-monogamy was more prevalent in Russia than in other countries (Fig. 1).

Financial cost was reported as a barrier most frequently by respondents in Germany and Canada (35% and 32%, respectively); of the countries represented in the survey, these two have the lowest IUC utilization rates (Table 2).

The perception that 'women don't like it [IUC]' was reported most frequently by HCPs in Sweden, UK, Germany, Canada, Ireland and The Netherlands and least frequently by HCPs in France, Russia and Turkey (Fig. 1).

Barriers to use of intrauterine contraception in nulliparous women

Respondents were asked to report their three main barriers to considering IUC for a nulliparous woman requesting contraception (Fig. 2). Concerns about insertion difficulty and insertion-related pain were the two most frequent barriers in all countries except