Experiences of crisis pregnancy among Irish and non-Irish adults living in Ireland: findings from the Irish Contraception and Crisis Pregnancy Survey 2010 (ICCP-2010).

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Abstract

Background: Using nationally representative data, this paper investigates the experience of crisis pregnancy (CP) among Irish and non-Irish adults living in Ireland in 2010.

Aims: To generate a detailed profile of Irish and non-Irish adults living in Ireland who have had an experience of CP and to investigate the differences in the experiences of CP between Irish and non-Irish adults.

Method: A national cross-sectional telephone survey methodology recruited 3002 adult (18-45 years) participants (69% response). Descriptive statistics and chi square analysis were used to compare the differences between the Irish (n=334) and non-Irish sample (n=57) with an experience of CP.

Results: The majority of respondents with an experience of CP had a higher education level and were aged between 18-25 years. Significant differences, in terms of outcome of CP, were also found between groups; with more Irish respondents choosing parenthood over abortion, compared with their non-Irish counterparts.

Conclusion: This paper presents a unique profile of Irish and non-Irish adults living in Ireland with an experience of CP. Enhanced promotion of longer-acting contraceptives to all younger adults, and targeted awareness raising of post-abortion services among the non-Irish community, is recommended.

Keywords: crisis pregnancy; contraception; survey; Irish; non-national; abortion

Introduction

Approximately 1.5 billion women in the world are of childbearing age (i.e. 15-45 years old) and of those, 210 million women become pregnant each year [1]. Of the total number of pregnancies that occur each year, approximately 40% of these are deemed unwanted [1]. While the terms 'unintended' or 'unplanned' pregnancy are commonly used terms in the United States and Europe [2] , an alternative term, 'crisis pregnancy' (CP) has been used in Ireland to define an unintended or unplanned pregnancy. In Ireland the term CP is used to define a pregnancy that represents a personal trauma for the woman or couple involved [3]. The adoption of this term has facilitated the distinction between unplanned or 'crisis' pregnancies specifically, and pregnancies that are unplanned, but do not necessarily represent a crisis for the women or couple involved [3]. The personal trauma or crisis can occur at any stage from the time of conception to delivery [3]. For the purposes of this paper the term CP will be mostly used, as the focus is a national sample of adults in Ireland. However, the distinction between terminologies is worth bearing in mind given the differences in their usage across jurisdictions.

There is a range of negative health, social, and psychological consequences across the lifespan related to an unwanted or unplanned birth. Adverse maternal and birth outcomes include poorer prenatal care [4], increased incidences of preterm delivery [5], and lower birth weight [6-7]. Children resulting from these unplanned pregnancies and even more so in cases of unwanted pregnancies, have been associated with lower levels of educational attainment [8], and increased levels of delinquency in adolescence [9]. In contrast, according to Mosher, Jones and Abma, efforts to reduce the proportion of pregnancies that are unwanted have been shown to reduce child poverty, improve family well-being, and reduce the overall cost to tax-payers [10].

Although an unwanted pregnancy can happen across the lifespan, age has been reliably identified as a good predictor, partially explained by the natural fertility rates of young women [2]. In fact, global figures suggest that 82% of pregnancies in girls aged 15-19 are unwanted [2]. Contraceptive failure has been identified as a leading cause of unwanted pregnancy, whether it is primarily viewed as a crisis or not [2]. The typical obstacles to the use of contraception are: fear of side effects; ambivalence towards pregnancy; health concerns; access to contraceptives; and concomitant substance usage that interacts with contraceptives and cultural barriers [2,11]. The choice of deciding on a contraceptive method depends on both its theoretical effectiveness and the personal circumstances, habits and preferences of the user [2].

Each year 26 million legal abortions and approximately 20 million illegal abortions are performed worldwide [12]. In many cases the outcome of an unwanted pregnancy is decided by the couple or woman involved (giving

birth, adoption, or abortion), or is the result of a medical condition that leads to that outcome (e.g. miscarriage or still birth) [3]. Importantly, the rate of giving birth, when faced with an unwanted pregnancy, is relatively low globally, compared to the rate of induced abortions [12]. However, legislative differences across jurisdictions can also impact on this outcome. For example, in Europe, nearly 80% of countries allow abortion to be performed for financial or social reasons and slightly fewer upon request [13]. In contrast, restrictive legislation concerning abortion in Ireland, professional regulator prohibitions regarding abortion-related procedures doctors can perform, and cultural and religious barriers, mean that legal abortion is effectively unavailable in any Irish setting [14].

Geographical proximity combined with more lenient laws, has meant that the UK has become a key provider of abortion services to women living in Ireland, although increasing numbers of women are travelling further afield (e.g., the Netherlands) [15]. In 2011, approximately 190,000 abortions were performed in England; a slight increase since 2001 [16]. While just 3% of these abortions were performed on non-residents, more than two thirds of this number was for women who gave an Irish address [15]. Based on recent figures, approximately 12 Irish women are travelling to the UK for abortion each day [15]. While there appears to be a gradual decline in the number of women travelling to the UK for abortion [16], this field lacks a detailed profile of Irish and non-Irish adults living in Ireland with an experience of CP. This along with context-related information about their experience of CP would be extremely useful in policy and services development.

Therefore, the primary aim of this study is to generate a detailed profile of Irish and non-Irish adults living in Ireland who have an experience of CP. The secondary aim is to investigate the differences in the experiences of CP between Irish and non-Irish adults living in Ireland.

Methods

Data were from the Irish Contraception and Crisis Pregnancy Survey 2010 (ICCP-2010) [3], a nationally representative cross-sectional telephone survey of men and women aged 18-45 years and living in Ireland (n=3002). ICCP-2010 was designed to assess knowledge, attitudes and behaviours in relating to sex, contraception and pregnancy. Telephone numbers (both landline and mobile phone) used in this study were generated using Random Digit Dialling (RDD) [3,17]. Using estimates derived from the 2010 Quarterly National Household Survey [18] individuals in selected households were chosen for interview [17]. This quota sampling technique ensured '*a representative mix of men and women in different age bands from different regions throughout the country'* and ensured that the sample was representative of the general population [17].

The overall response rate for the survey was 69% (79% for the landline strand and 61% for the mobile telephone strand). More detailed survey methodology is reported elsewhere [3,17].

Sample Description and Variables of Interest

Irish and non-Irish sample

The Irish sample consisted of adults who were born in Ireland or had moved to Ireland before the age of 13 and who reported an experience of CP (n=334). The non-Irish sample consisted of adults who had moved to Ireland after the age of 13 and reported an experience of CP (n=57). Of note, the vast majority of non-Irish respondents (71%) had originated from a European country. The age of 13 was chosen to distinguish adults who spend their childhood in different social, educational and cultural environments and may have different conceptions and knowledge towards contraception use and crisis pregnancy [3].

Demographic Variables

Socio-demographic variables of interest were: gender; current age (recoded into 3 groups age 18-25 years, 26-35 years and 36-45 years); level of education (coded as pre-leaving certificate and leaving certificate or higher); current relationship status (coded as married, cohabiting, steady relationship not cohabiting, casual relationship, or not in a relationship); number of children; and social class (coded as SC 1-2 including professional workers and managerial and technical workers (reference category); SC 3-4 including non-manual and skilled manual workers; SC 5-6 including semi-skilled and unskilled workers; and SC 7 which included all others including never worked and long-term unemployed). Religiosity was also assessed by participants indicating how important religion was to them on a 5-point Likert scale, ranging from 'very important' to 'not at all important'. This scale was recoded into 3 groups, important, neutral, or not important.

Experience of Crisis Pregnancy (CP)

Age at time of CP

Respondents were asked at what age they had experienced their CP. This continuous variable was collapsed into 4 groups as follows: Under 18 years old; 18-25 years old; 26-35 years old; and 36-45 years old.

Method of contraceptive used at time of CP

Respondents with an experience of CP were asked if they had used any method of contraception or taken any precautions at the time of the conception. Those that said 'Yes' were asked to provide further details. A range of 16 categories were coded nominally from A-P, option P being no method used. These were the collapsed into four different groups using the Pearl Index. A Pearl Index categorises contraceptives based on its intrinsic

efficacy and potential of misuse [19]. Every form of contraception is given an index or value that corresponds to its efficacy. The four groups were: no method of contraception used; Superior method - contraceptives with high efficacy and low potential of misuse (vasectomy, ligation, coil, IUD, IUS); medium method - contraceptives with high efficacy but high potential of misuse (contraceptive pills, contraceptive ring, Injections); and low method - contraceptives with low efficacy and low potential of misuse (condoms, cap/diaphragm, withdrawal, safe period, gel/sprays and persona).

Outcome of CP

All participants who reported an experience of CP were also asked about the outcome of their CP. Due to the low numbers of adoption and still births these were excluded from analyses and remaining responses were binary coded as either abortion or parenthood.

Analytical Plan

The analysis of this paper was conducted in stages. Data from the entire sample who experienced a CP was analysed for these first two stages: (a) explore the profile of Irish and Non-Irish adults who have experienced a CP (b) identify the differences in the experiences of CP among Irish and non-Irish adults using the chi-square analysis. Data were statistically adjusted or weighted prior to analyses using information taken from the Census and the Quarterly National Household Survey (QNHS) on: gender, age, marital status, education, region, number of adults per household, nationality, family type and type of telephone in the household. This procedure ensures that the sample is representative of the population from which it was selected. To demonstrate this both unweighted and weighted figures are reported.

Results

Demographic profiles

Descriptive statistics were conducted to explore the demographic profile of Irish (n=334) and non-Irish adults (n=57) who reported an experience of CP. Results are presented in Table 1. In brief, both samples were broadly similar in demographic characteristics. For example, the majority of respondents were women, (Irish 69% and non-Irish 78%). Irish respondents with a history of a CP were slightly older (36-45 years) than those in the non-Irish sample (26-35 years). Similar proportions from both samples reported: higher levels of education; being currently married; having two children; and that religious beliefs were important to them. Interestingly, respondents from the non-Irish sample were largely in the higher social classes (SC1-2) compared to the Irish

respondents who were mostly from lower social classes (SC3-4). However, as these demographic characteristics are reflective of respondents' current status and not their status at the time of the CP, any further conclusions are limited.

Insert Table 1 here

Age at time of CP

Both samples generally showed similar trends. The highest proportion of CPs from the Irish and non-Irish sample occurred at the age of 18-25; 41% and 58% respectively. The age group of 36-45 had the lowest incidence of CP in both samples.

Method of contraception used at time of CP

The type of contraceptive used at the time of CP for Irish adults and non-Irish adults also showed similar trends. Similar proportions of adults from both groups reported using used contraceptive methods with the lowest efficacy and highest potential of misuse (20.6% and 14% respectively). Just two participants in both groups reported using contraceptive methods with high intrinsic efficacy and low potential of misuse (0.5% and 3.5% respectively) at the time of their CP.

Outcome of the CP

Approximately, 62% of CPs occurring in Irish adults in this study resulted in parenthood. This is compared to more than four out of ten (47%) of CPs in non-Irish adults. Consequently, abortion rates were higher among non-Irish adults where approximately 35% resulted in abortion, compared with just 19% in Irish respondents.

Chi square analyses

Chi square analyses were used to check for any significant differences between the Irish and non-Irish samples on the three variables related to their CP: age at the time; method of contraception used at the time of conception; and outcome of the CP. The results of these analyses are presented in Table 2. No significant differences were found between groups on age at the time of the CP and method of contraception used at the time of the conception. Statistically, the two groups were significantly different in terms of outcomes of CP, χ^2 (1, 390) = 7.30, $p < 0$ .01. In summary, non-Irish adults reporting an experience of CP were significantly more likely to have had an abortion, compared to their Irish counterparts. Conversely, Irish adults were significantly more likely to opt for parenthood compared to non-Irish adults, when faced with a CP.

Insert Table 2 here

Discussion

A number of studies have investigated the experience of unintended or unwanted pregnancies among adults or more commonly among teenagers [2,4,5,20]. However, there are limited studies in the literature in terms of CP 11]. This unique study generated a detailed profile of Irish and non-Irish adults currently living in Ireland with an experience of CP. A significant difference was also found between groups in the outcome of their CP.

Before a discussion of the key findings, some limitations, and strengths are worth mentioning. The absence of longitudinal data means there is an assumption that there is no recall bias of perceiving the pregnancy as a crisis. While respondents were asked about their experience of CP there may have been a substantial lapse in time between experiencing their CP and their participation in this study. Furthermore, the age at the time of the CP may be underestimated owing to the fact that those that were younger at the time of the survey, may yet go on to experience a CP. Despite these limitations, the current study has a number of notable strengths, making it a valuable contribution to the literature in this area. First the current study involved a sample size representative of the national population [3]. Additionally, the pioneering recruitment strategy employed demonstrated that recruitment for general population public health surveys using mobile telephones was both feasible and successful in achieving a high response rate and nationally representative sample [17]. Finally, this is a unique contribution to the literature as it investigates not only the differences in the experience of CP among adults in living in Ireland, but presents a contemporary profile on the experience of CP of adults in Ireland.

Key findings from the demographic profile of Irish and non-Irish adults who have reported having a CP will be presented before a discussion of the differences in their experience of CP. Firstly, across both samples, adults with higher level of education and higher social class reported having a CP. This differs from other studies that show adults with lower education levels and lower social classes having higher rates of unwanted pregnancy [20, 21]. This difference may be due to the critical timing of the pregnancy, occurring at an important career trajectory and this has lead them to perceive the pregnancy as crisis, bearing in mind , the difference in defining the term ‘unwanted’ or ‘crisis’. In terms of religiosity, greater numbers from both samples with higher religious affiliation reported having experienced a CP. This differs from other studies that found that adults with lower religious affiliations reported higher rates of unwanted pregnancy [20]. However, this finding may be partially accounted for by the definition of CP used. In sum, their retrospective perception of the CP as a crisis may have been influenced by the fact that most reported being Roman Catholic, and they are resident in a country with

restricted access to abortion. Therefore, only cautious implications can be drawn from these findings with respect to informing policy and health care services.

The highest percentage of Irish and non-Irish respondents reporting an experience of CP from both samples were in the 18-25 years age group. This finding echoes other studies that have found the same age group with the highest rates of unwanted pregnancy [20, 22]. Another trend noted was the use of less reliable contraceptives (low efficacy and high potential of misuse) at the time of CP by both Irish and non-Irish adults. Therefore, this study cautiously suggests that the awareness of, and access to, contraception with high efficacy is poor among adults living in Ireland. Awareness campaigns should promote the advantages of long-acting reversible contraceptives (LARCs), particularly among younger adults; with a view to improving uptake of this form of contraception and encouraging planned parenthood from a young age.

One key finding was the significant difference found in the outcomes of CP, between Irish and non-Irish adults. Non-Irish adults were more likely to opt for an abortion compared to Irish adults. This finding is most likely reflective of the availability of abortion services in the respondent's country of origin (i.e. most of the non-Irish were from a European country where abortion is largely available). Of course, those who choose to migrate such as the non-Irish participants in this survey may differ from nationals who stay in their own countries. Similarly, we have no idea of the CP profile of those Irish-born young adults who could not feature in this Irish survey because they themselves have emigrated. The larger number of Irish adults opting for parenthood over abortion is likely to be in part related to the lack of access to abortion in Ireland, as well as to a complex set of personal and societal attitudes to abortion [14]. Although the absolute number of non-Irish women with an experience of CP and abortion will be smaller than Irish women, contraception as well as post-abortion services should endeavour to promote their services to non-Irish adults living in Ireland as they have had proportionally higher levels of abortion than their Irish counterparts.

In conclusion, this study generates a unique profile of Irish adults currently living in Ireland with an experience of CP and explores some of the similarities and differences in the experience of a CP between Irish and non-Irish adults. Enhanced promotion of LARCs to Irish and non-Irish younger adults, and targeted awareness of post-abortion services among the non-Irish community living in Ireland, is recommended.

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Table 1: Socio-demographic characteristics of Irish and non-Irish adults who experienced crisis pregnancy.

	Irish Sample (*n* = 334)		Non-Irish Sample (*n* = 57)	
	Un-weighted N (%)	**Weighted %**	**Un-weighted N (%)**	**Weighted %**
Gender				
Men	111 (33.2)	31.0	11 (19.3)	21.7
Women	223 (66.8)	69.0	46 (80.7)	78.3
Current age				
18-25 years	37 (20.2)	11.5	4 (37.3)	12.2
26-35 years	146 (43.7)	41.6	28 (49.1)	56.2
36-45 years	151 (45.2)	46.9	306 (43.9)	31.6
Education level				
Pre-Leaving Cert	64 (19.2)	28.2	4 (7.0)	4.8
Leaving Cert. or higher	270 (80.8)	71.8	53 (93.0)	95.2
Relationship status				
Married (and living with spouse)	151(45.2)	48.6	40 (70.2)	72.4
Cohabiting	73 (21.2)	15.9	4 (7.0)	5.7
Steady relationship (not cohabiting)	24 (7.2)	5.5	4 (7.0)	9.4
Casual relationship	17 (5.1)	7.9	2 (3.5)	1.3
Not in a relationship	69 (20.7)	22.1	7 (12.3)	11.1
Number of children [a]				
1	88 (26.3)	19.0	14 (24.6)	23.5
2	90 (26.9)	27.5	17 (29.8)	35.7
3	70 (21.0)	21.6	16 (28.1)	23.8
4-9	38 (11.4)	13.4	5 (8.8)	4.7
Social class				
SC 1-2	121 (36.2)	21.9	20 (35.1)	31.4
SC 3-4	121 (36.2)	37.9	13 (22.8)	25.9
SC 5-6	32 (9.6)	9.8	11 (19.3)	25.6
SC 7	60 (18.0)	20.4	13 (22.8)	17.2
Religiosity[b]				
Important	150 (44.9)	47.3	36 (63.2)	67.3
Neither	45 (13.5)	13.8	3 (5.3)	4.3
Not important	139 (41.6)	39.0	18 (31.6)	28.4

Note. SC = Social class. [a] Variable contains minimal levels of missing data. [b] For brevity the levels of religiosity were recoded into three categories.

Table 2: Differences in the experience of Crisis Pregnancy between Irish and non-Irish adults.

	Irish Sample N (%)	Non-Irish Sample N (%)	χ^2 (df) (φ)
Age at time of CP			
<18 years	37 (11.1)	4 (7.0)	6.56 (388) (.11)
18-25 years	136 (40.7)	33 (57.9)	
26-35 years	78 (23.4)	13 (22.8)	
36-45 years	23 (6.9)	2 (3.5)	
Missing	60 (17.9)	5 (8.8)	
Method of contraceptive used at time of CP			
No method of contraception	145 (43.4)	25 (43.9)	4.15 (388) (.13)
Superior method	2 (0.5)	2 (3.5)	
Medium method	46 (13.8)	5 (8.8)	
Low method	69 (20.6)	8 (14.0)	
Missing	72 (21.6)	17 (29.8)	
Outcomes of CP			
Parenthood	206 (61.6)	27 (47.3)	7.30* (390) (.15)
Abortion	64 (19.2)	20 (35.1)	
Missing	64 (19.2)	10 (17.5)	

Note. CP = Crisis pregnancy
* $p<0.01$