

Original Research

# Knowledge of, beliefs about, and perceived barriers to the use of the emergency contraception pill among women aged 18-51 in Nova Scotia

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## ABSTRACT\*

**Objectives:** To investigate women in Nova Scotia (NS), Canada with respect to their knowledge of, beliefs about, and perceptions of barriers to accessing emergency contraception pills (ECP). **Methods:** A random digit dialing approach was used to survey a representative sample of NS women aged 18-51. Analyses described the knowledge, beliefs, and perceived barriers associated with ECP access among participants. Particular focus was given to differences between younger (age 18-31) and older (age 32-51) women. **Results:** The survey response rate of 49% achieved the desired sample size of 770. Overall, women in NS appeared to be poorly informed about ECP with regards to effectiveness, proper timing of administration, how it works, as well as how to access Plan B®. Younger women (age 18-31) were significantly more likely than older women (age 32-51) to know that ECP does not always prevent pregnancy ( $p<0.01$ ), that it can be taken more than 12 hours after unprotected intercourse ( $p<0.01$ ), and that it is available without a prescription in pharmacies ( $p<0.01$ ). Thirty percent of women agreed that ECP will cause an abortion, with older women ( $p<0.01$ ) being more likely than younger women to agree. Cost and lack of privacy in pharmacies were identified as potential barriers to access. **Conclusions:** Lack of knowledge and the perception that ECP causes an abortion may influence a woman's ability to consider ECP as an option should she find herself at risk of an unplanned pregnancy. To address this, efforts should be made to educate women (including older

women) about ECP and its availability in pharmacies.

**Keywords:** Contraception, Postcoital. Women's Health. Health Knowledge, Attitudes, Practice. Age Factors. Canada.

## CONOCIMIENTO, CREENCIAS Y BARRERAS PERCIBIDAS SOBRE EL USO DE CONTRACEPCIÓN DE EMERGENCIA ENTRE MUJERES DE 18-51 AÑOS EN NUEVA ESCOCIA

### RESUMEN

**Objetivos:** Investigar a las mujeres de Nueva Escocia (NS), Canadá sobre sus conocimientos, creencias y percepciones de las barreras de acceso a las píldoras de contracepción de emergencia (PCE). **Métodos:** Se utilizó una selección aleatoria de números para encuestar a una muestra representativa de mujeres de NS entre 18-51 años. El análisis describió el conocimiento, creencias y barreras percibidas asociadas con el acceso a PCE entre las participantes. Se prestó especial atención a las diferencias entre mujeres jóvenes (edad 18-31) y mayores (edad 32-51). **Resultados:** La tasa de respuesta de la encuesta fue del 49%, alcanzando el tamaño deseado de 770. En general, las mujeres en NS parecían poco informadas sobre la PCE en relación a su efectividad, tiempo apropiado de la administración, como funciona, así como del acceso al Plan B®. Las más jóvenes (edad 18-31) tenían significativamente más probabilidad de saber que las PCE no siempre previenen del embarazo ( $p<0,001$ ), que pueden tomarse más tarde de las 12 horas de la relación no protegida ( $p<0,001$ ), y que están disponibles sin receta en las farmacias ( $p<0,001$ ). El 30% de las mujeres afirmó que las PCE producían un aborto, siendo las mujeres mayores las que más probablemente afirmaban eso ( $p<0,001$ ). El coste y la falta de privacidad en las farmacias fueron las potenciales barreras identificadas para el acceso. **Conclusiones:** La falta de conocimiento y la percepción de que las PCE producen un aborto pueden influir en la capacidad de considerar las PEC como una opción si la mujer se encuentra en riesgo de embarazo no planeado. Para resolver esto, deben realizarse esfuerzos para educar a las mujeres (incluyendo a las mujeres mayores) sobre las PCE y su disponibilidad en las farmacias.

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**Palabras clave:** Contraception, Postcoital. Women's Health. Health Knowledge, Attitudes, Practice. Age Factors. Canada.

## INTRODUCTION

Unplanned pregnancy is a serious health and social concern for women which has been associated with negative medical and social consequences for both mother and child, including poor prenatal health<sup>1</sup> and low birth weight infants.<sup>2,3</sup> Although concrete data are lacking regarding the occurrence of unplanned pregnancies, rates of therapeutic abortion may be used as a proxy. In 2005, the most recent year for which data are available, almost 1 in 5 (18%) pregnancies in Nova Scotia (NS) ended in abortion.<sup>4</sup> Abortion was an even more common outcome in younger women: in 2005, 29% of pregnancies among 20-24 year olds, and 43% of pregnancies among 15-19 year olds ended in abortion.<sup>4</sup> Overall in 2005, Canadian women had in excess of 96,000 abortions, of which 1897 were performed in NS.<sup>4</sup>

Emergency contraception (EC) is a method of contraception administered after unprotected intercourse to prevent unplanned pregnancy. Potential reasons for unprotected intercourse and need for EC may include contraceptive failure (e.g., condom breakage), sexual assault, or intercourse that occurs when using alcohol or other drugs.<sup>5</sup> EC is most often given as emergency contraceptive pills (ECP) administered within 120 hours after unprotected intercourse. The effectiveness of ECP in preventing pregnancy as demonstrated in clinical trials ranges from 50% to 85%.<sup>6-10</sup> Currently, ECPs are available in Canada as either a levonorgestrel preparation or as progestin/estrogen combination. The first levonorgestrel product (Plan B®) was introduced in Canada in 2000 as a Schedule I product (available by prescription only). In 2005, regulatory changes enhanced women's accessibility to levonorgestrel when it became a Schedule II product (available without a prescription following consultation with a pharmacist). More recently, with regulatory changes in May 2008, levonorgestrel was re-classified as a Schedule III product<sup>11</sup> meaning that the drug is now available in Canadian pharmacies without a pharmacist consultation, though a pharmacist must be present and available for counseling. In 2009, a second levonorgestrel product, NorLevo®, was marketed in Canada, but was not available at the time of this study. The progestin/estrogen combination ECP remains available in Canada by prescription only.

Despite improved accessibility to ECP since 2000, the number of therapeutic abortions in NS remains stable (8.3/1000 in 1995 and 8.1/1000 in 2005: rate per 1,000 females aged 15 to 49).<sup>4</sup> While there is evidence that ECPs are under-used in the United States (US)<sup>12,13</sup>, where hundreds of thousands of abortions occur each year, there are no data as to whether or not ECP is currently underused in NS or Canada. Women's knowledge of, and beliefs about ECP, as well as their perceptions of barriers to

accessing the product, may influence their use of ECP if it should be needed.<sup>14-17</sup> Data from Canadian women about these issues are sparse. In the 2002 Canadian Contraception Study (CCS), 57% of women aged 15-44 indicated that they were familiar with EC<sup>18</sup>, while a small study of NS high school students, conducted in 1997, found that more than 80% of females aged 15-19 were aware of EC.<sup>19</sup> Age has been shown to be a factor in EC knowledge and attitudes: for example, various European, Asian, and American studies suggest that younger women have greater awareness and knowledge of EC and a more favourable attitude toward EC than older women.<sup>14,16,20-24</sup> No data specific to a wide age range of women in NS or in Canada have yet been published.

This study was designed to explore factors which could affect NS women's ability to access ECP in light of the regulatory changes described above, which were intended to make Plan B® more easily accessible. The objective of the research presented here was to gather information about NS women's knowledge of, beliefs about, and perception of barriers to accessing ECP and to examine differences with respect to these factors between younger (18-31 years of age) and older (32-51 years of age) women. Such information will be helpful in overall knowledge of ECP, and in determining whether messages need to be targeted at different age groups of women.

## METHODS

### Survey development

A 34 item questionnaire was developed covering five main areas: 1) knowledge regarding ECP; 2) beliefs about EC and Plan B®; 3) perception of barriers to accessing Plan B®; 4) intention to use EC; and, 5) demographics. The initial draft of the questionnaire was constructed based on a review of the literature and from the results of focus groups conducted with women aged 18-51 years who resided in rural and urban parts of NS in January 2007. The draft questionnaire was then pilot tested in a small convenience sample of women. Additional feedback on the survey was provided by two independent reviewers with no affiliation to the study but with experience in survey design, and from the private agency (Corporate Research Associates, CRA, Halifax, NS) contracted to administer the questionnaire. Based on this feedback, and to make the questionnaire suitable for implementation using computer assisted telephone interviewing (CATI) software, revisions were made and the questionnaire was finalized.

### Survey administration

The survey data were collected by Corporate Research Associates (CRA), an experienced research group frequently involved in health related random digit dialing (RDD) telephone surveys in NS. Potential respondents were informed that participation was voluntary and confidential in nature. To maintain anonymity no personal identifiers were attached to the survey data. Data were collected from November 2008 to February

Table 1. Socio-demographics of respondents by age.

Demographic Variable	Aged 18-31 (%) n=258	Aged 32-51 (%) n=512	Overall (%) n=770	Test
Relationship Status				
Single or In a relationship but not living with partner	42.2	16.8	25.3	$\chi^2=58.76$ ; $p<0.01$
Married or in a relationship and living with partner	57.8	83.2	74.7	
Education				
Some/all high school	22.5	15.7	18.0	$\chi^2=5.37$ ; $p<0.01$
Some/all community college or some/all university	77.5	84.3	82.0	
Yearly Income				
<\$25,000	19.1	5.5	10.0	$\chi^2=65.88$ ; $p<0.001$
≥\$25,000 to <\$50,000	31.5	23.4	26.1	
≥\$50,000 to <\$75,000	28.8	27.0	27.6	
≥\$75,000 to <\$100,000	13.2	20.5	18.1	
≥\$100,000	7.4	23.6	18.2	
Ethnicity				
Caucasian/White	91.5	92.4	92.1	$\chi^2=0.19$ ; $p=0.378$
Other	8.5	7.6	7.9	
Religious Preference				
Has an organized religion	64.7	80.3	75.1	$\chi^2=22.15$ ; $p<0.01$
Does not have an organized religion	35.3	19.7	24.9	
Religious Importance				
Not important	49.0	30.1	36.4	$\chi^2=31.08$ ; $p<0.01$
Important	51.0	69.9	63.6	

2009. CRA provided collated, anonymous results to the investigators.

Women aged 18-51 living in NS were eligible to be interviewed. Women under the age of 18 were excluded as the vast majority of pregnancies in the 15-19 year old age category are among 18 and 19 year olds.<sup>25</sup> They were also excluded for privacy reasons, for example to minimize situations in which parents might overhear telephone interviews about contraception with younger adolescents. Women over the age of 51 were excluded as this is the average age of menopause in Canada<sup>26</sup> and the majority of these women are unlikely to have need for EC.

Based on the underlying population of women aged 18-51 in NS, and allowing for 95% confidence and confidence limits of +/-5%, the required sample size was 766. Ethical approval for this project was obtained from the Dalhousie University Health Sciences Ethics Review Board.

#### Data analysis

Statistical analysis consisted of descriptive statistics and chi-square analysis for comparison of responses by age group of women. First, respondent characteristics were examined by age group. Next women's knowledge of ECP was examined by age group using a series of nine knowledge questions to which respondents could reply "True" "False" or "Don't Know". Mean knowledge scores were examined using summed knowledge scores for these items by assigning one point for each correct answer. The internal consistency of the scale was determined using the Kuder-Richardson 20 test, which was acceptable at 0.60.<sup>27</sup> To examine beliefs about ECP, women were asked about their agreement with five statements reflecting such beliefs (e.g., "Emergency contraception is wrong for moral reasons.") Responses were dichotomized into those who strongly agreed/ agreed vs. those who neither agreed nor disagreed, disagreed or strongly

disagreed. Overall consistency of these five belief items as a scale was examined using Cronbach's alpha.<sup>27</sup> Overall mean scale scores were examined by age group. Finally women were asked about perceived barriers to access to emergency contraception using a five point Likert scale to respond to statements such as: "At an approximate price of USD40.00, Plan B costs too much." Barriers were not assessed as a scale since this was felt to be conceptually inaccurate. Data were analyzed using SPSS version 15.

#### RESULTS

Seven hundred and seventy women participated in the survey, representing a response rate of 49%. Of the respondents, 258 (34%) were between the ages of 18-31 and 512 (66%) were aged 32-51 (Table 1). The majority of respondents were Caucasian (92.1%), married or in relationship living with a partner (74.7%), and had completed some or all of a community college or university education (82.0%). Seventy-five percent of respondents reported having an organized religion and 69.9% rated religion as important.

Responses to the knowledge and awareness questions are reported in Table 2. There were several areas where the majority of respondents gave incorrect answers. Knowledge of the correct timing for the administration of ECP was poor with only 32% of respondents knowing that ECP does not have to be taken within 12 hours of unprotected sex to be effective, and only 15% knew that ECP can be given up to 5 days after unprotected sex. Similarly, just 32% of respondents knew that if a woman was already pregnant, ECP would not end that pregnancy. Approximately one-third of respondents knew that ECP was available in NS in a pharmacy without a prescription from a physician. With respect to knowledge differences by age category, younger women were significantly more likely ( $p<0.01$ ) than older women to know the

Table 2. Responses to emergency contraception knowledge and awareness questions by age.

Question (correct answer in brackets following question)	Answer	Aged 18-31 (%) n= 258	Aged 32-51 (%) n=512	Overall (%) n=770	Test
1. Women are most likely to get pregnant if they have sex two weeks before their period begins. [TRUE]	Correct Incorrect	55.4 44.6	65.8 34.2	62.3 37.7	$\chi^2=7.89$ ; $p<0.01$
2. Emergency contraceptive pills always prevent pregnancy. [FALSE]*	Correct Incorrect	83.3 16.7	67.0 33.0	72.5 27.5	$\chi^2=22.96$ ; $p<0.01$
3. To be effective, emergency contraceptive pills must be taken within 12 hours of unprotected sex. [FALSE]**	Correct Incorrect	43.0 57.0	25.6 74.4	31.4 68.6	$\chi^2=24.20$ ; $p<0.01$
4. Emergency contraceptive pills are more effective the earlier they are taken after unprotected sex. [TRUE]	Correct Incorrect	83.7 16.3	74.9 25.1	77.8 22.2	$\chi^2=7.82$ ; $p<0.01$
5. Emergency contraceptive pills can be effective if taken up to five days after unprotected sex. [TRUE]	Correct Incorrect	14.3 85.7	15.0 85.0	14.8 85.2	$\chi^2=0.06$ ; $p=0.81$
6. The use of Emergency Contraceptive pills can make it harder for a woman to get pregnant in the future. [FALSE]	Correct Incorrect	57.0 43.0	53.8 46.2	54.9 45.1	$\chi^2=0.70$ ; $p=0.41$
7. Emergency contraceptive pills will always make a woman vomit. [FALSE]	Correct Incorrect	62.6 37.4	46.9 53.1	53.1 47.9	$\chi^2=17.06$ ; $p<0.01$
8. If a woman is already pregnant, emergency contraceptive pills will not end the pregnancy. [TRUE]	Correct Incorrect	42.2 57.8	26.2 73.8	31.6 68.4	$\chi^2=20.53$ ; $p<0.01$
9. To the best of your knowledge, can women in Nova Scotia obtain Emergency Contraceptive pills from a pharmacist without a doctor's prescription? [YES]**	Correct Incorrect	45.1 54.9	20.7 79.3	28.9 71.1	$\chi^2=49.74$ ; $p<0.01$

correct timing of ECP administration, that ECP does not always make a woman vomit, and that ECP does not always prevent pregnancy or have any effect on an established pregnancy. Younger women were also significantly more likely ( $p<0.01$ ) than older women to know that ECP is available without a physician's prescription. Older women were significantly more likely ( $p<0.01$ ) than younger women to know that women are most likely to get pregnant if they have sex two weeks before their period begins. The mean score for the younger women (4.86; SD=1.86) and for older women (3.96; SD 2.02) were significantly different ( $p<0.01$ ) indicating that overall younger women were more knowledgeable than older women.

Respondents level of agreement with various statements regarding beliefs towards EC are shown in Table 3. Fewer than 15% of respondents strongly agreed/agreed that EC was wrong for moral reasons, that EC does not work, or that a doctor or pharmacist would think women who asked for EC

are irresponsible. Approximately one-third of respondents strongly agreed/agreed that EC will cause an abortion while 37% felt that easy access to EC will lead to a decrease in use of other methods of birth control. Age group was significantly associated with only one statement, with a greater proportion of older women (34.2%) than younger women (23.3%) agreeing that EC will cause an abortion. The mean score for the younger women (18.69; SD=3.02) and for older women (17.91; SD=3.20) were significantly different ( $p<0.01$ ) indicating that overall younger women had more positive beliefs about emergency contraception than older women.

Participants' level of agreement with statements regarding barriers to accessing Plan B® is reported in Table 4. Approximately 38% of respondents strongly agreed/agreed that Plan B® costs too much. One-fourth of respondents felt it would be embarrassing to discuss Plan B® with a pharmacist and 34% would be uncomfortable speaking to a

Table 3. Agreement with statements regarding beliefs about emergency contraception.

Statement	Level of Agreement	Aged 18-31 (%) n=258	Aged 32-51 (%) n=512	Overall (%) n=770	Test
1. Emergency Contraception is wrong for moral reasons.	Agree* **Neutral/Disagree	10.5 89.5	12.3 87.7	11.7 88.3	$\chi^2 = .56$ ; $p=0.45$
2. Emergency Contraception does not work.	Agree Neutral/Disagree	2.7 97.3	5.7 94.3	4.7 95.3	$\chi^2=3.31$ ; $p=0.07$
3. Emergency Contraception will cause an abortion.	Agree Neutral/Disagree	23.3 76.7	34.2 65.8	30.5 69.5	$\chi^2=9.65$ ; $p<0.01$
4. A doctor or pharmacist will think women who ask for Emergency Contraception are irresponsible.	Agree Neutral/Disagree	10.9 89.1	14.5 85.5	13.2 86.8	$\chi^2=1.94$ ; $p=0.16$
5. Easy access to Emergency Contraception will lead to a decrease in the use of other methods of birth control.	Agree Neutral/Disagree	33.5 66.5	38.1 61.9	36.5 63.5	$\chi^2=1.58$ ; $p=.21$

\*Agree: includes all "strongly agree" and "agree" responses  
 \*\* Neutral/Disagree: includes all "neither agree or disagree", "disagree" and "strongly disagree" responses

Table 4. Agreement with Statements Regarding Perceptions of Barriers to Emergency Contraception Pills (Plan B®)

Statement	Level of Agreement	Aged 18-31 (%) n=258	Aged 32-51 (%) n=512	Overall (%) n=770	Test
1. At an approximate price of \$40, Plan B® costs too much.	* Agree ** Neutral/Disagree	39.1 60.9	36.3 63.7	37.3 62.7	$\chi^2=0.58$ ; $p=0.45$
2. It would be embarrassing to discuss Plan B® with the pharmacist, even if the conversation were private.	Agree Neutral/Disagree	23.3 76.7	25.7 74.3	24.9 75.1	$\chi^2=0.56$ ; $p=0.45$
3. It would be uncomfortable to speak with a male pharmacist about Plan B®.	Agree Neutral/Disagree	35.7 64.3	33.1 66.9	34.0 66.0	$\chi^2=0.49$ ; $p=0.49$
4. It would be difficult to discuss Plan B® with the pharmacist because conversations in pharmacies are often not very private.	Agree Neutral/Disagree	65.9 34.1	69.1 30.9	68.1 31.9	$\chi^2=0.83$ ; $p=0.36$
5. The pharmacist cannot be trusted to keep confidential any personal information collected when providing Plan B®.	Agree Neutral/Disagree	8.5 91.5	7.0 93.0	7.5 92.5	$\chi^2=0.55$ ; $p=0.46$

\*Agree: includes all "strongly agree" and "agree" responses  
 \*\* Neutral/Disagree: includes all "neither agree or disagree", "disagree" and "strongly disagree" responses

male pharmacist. Sixty-eight percent of respondents strongly agreed/agreed that it would be difficult to discuss Plan B® in a pharmacy because conversations in pharmacies are often not very private. Only 7.5% of respondents agreed that pharmacists could not be trusted to keep confidential any personal information that was discussed. Respondents were also asked if pharmacists should be able to ask women personal questions when providing Plan B®. Overall 90.6% strongly agreed/agreed with this statement, with 91.9% of younger women and 90.0% of older women agreeing. Age group was not associated with any of the barriers.

## DISCUSSION

This study examined knowledge of, beliefs about, and perceptions of barriers to accessing ECP among women in Nova Scotia and investigated differences in these by age group. The number of respondents in each age group (34% in the 18-31 age group and 66% in the 32-51 age group) were similar to proportions identified in the 2007 Nova Scotia census data which reported 90,000 women in the younger and 132,000 women in the older age groups.<sup>28</sup> A comparison of other socio-demographic data of the survey respondents to census data suggests that the sample was fairly representative of the NS population in terms of relationship status and household income, though the study sample included a higher proportion of visible minority women compared to the provincial average.<sup>29</sup>

The majority of respondents knew that ECP is more effective the sooner it is taken after unprotected intercourse, however over half of the respondents did not know that it could be taken up to 5 days after unprotected intercourse. Emergency contraception pills are approved for use up to 72 hours after intercourse but can be used up to 5 days after.<sup>30,31</sup> Some respondents may have known this and answered this question as "False". However, it was important to determine if women knew about this extended time frame, in order to evaluate whether this information should be part of future educational initiatives. The results from this study regarding knowledge of timing of administration are reflective

of other studies which report that women's knowledge about the correct timing of ECP administration ranges from as low as 7%<sup>23</sup> to as high as 51.8%.<sup>14</sup> Direct comparison of the results of this study to the only other available data from NS women regarding their knowledge of the timing of EC administration is not possible. The only previous study in NS of EC knowledge involved female high school students, younger than the respondents in this survey.<sup>19</sup> In this study, the majority (68.3%) of respondents were not aware that ECP could be obtained in a pharmacy without a physician's prescription. Another study, conducted in BC, Canada, that found just 9.6% of 52 women were aware of ECP's availability without a physician prescription.<sup>32</sup> Though knowledge of the accessibility of ECP seems suboptimal in NS, in comparison with what is known in other jurisdictions, NS women do relatively well.

In general, younger women were significantly more likely than older women to answer knowledge questions correctly. Congruent with these results, the 2002 Canadian Contraception Study also found that adolescents (aged 15-18 years old) were more familiar with ECP than were respondents overall.<sup>33</sup> Studies in other countries have found that younger women are more knowledgeable about ECP than older women.<sup>14,20,22</sup> This may be because older women may be in more stable relationships and have less need for ECP, although this remains to be confirmed.

In the present study, 30.5% of respondents believed that EC will cause an abortion. Older women were also significantly more likely ( $p<0.01$ ) than younger women to strongly agree/agree with this statement. Qualitative research in BC has found that some women believed ECP was the abortion pill.<sup>32</sup> Internationally, other surveys report that from 4.9% to as many as 37% of respondents believe that ECP is an abortifacient.<sup>14,34</sup> This may be an important perception to counter in any public or other education efforts about ECP.

Perceptions of the cost of Plan B® were varied (Table 4) with almost 38% strongly agreeing/agreeing that it is too expensive. Similarly, a study of EC users in Ontario found that 42.7% of

participants agreed that the cost of ECP is too high.<sup>35</sup> Cost may thus be an important consideration in promoting use of ECP in NS, as it is elsewhere in Canada.

Approximately 34% of respondents in this study indicated that they would be uncomfortable speaking with a male pharmacist about Plan B®. This was also reported in a qualitative study of BC women in 2007<sup>32</sup> that found that women generally were uncomfortable with the idea of receiving EC from a male physician or pharmacist. The vast majority of respondents strongly agreed/agreed that pharmacists should be able to ask personal questions when providing Plan B® (90.8%) and that pharmacists could be trusted to keep the information confidential (92.5%). These results are in contrast to the concerns expressed, when legislative changes were made in Canada to the availability of Plan B®, that pharmacists asking for and storing personal information may unnecessarily create barriers to access.<sup>36-38</sup> Respondents to this survey did not appear to have these concerns.

A strength of this research is that this was the first large scale population based study of EC conducted in NS and Canada, thus it provides valuable insight into women's awareness of the present accessibility of Plan B® in pharmacies without a physician's prescription. As well, examination of the demographics of respondents indicates the sample is fairly reflective of the entire population of NS women, with only a slight overrepresentation of minority groups compared to the actual distribution in the NS population. This suggests good generalizability which is particularly valuable since the findings can be used to inform educational needs. However, it should be noted that the differences that were observed in the socio-demographic factors may have influenced the results, although in the literature the impact of these factors are conflicting. For example, higher education has been associated with increased awareness of EC<sup>21</sup> and increased trend towards use<sup>39</sup> while another study<sup>40</sup> found no association of use of EC with education level. One of the limitations of the survey is that the RDD technique used by CRA was restricted to land telephone lines, thereby inadvertently excluding those who do not have a land line, including those who rely solely on a cell phone. Although the response rate was only

49% in this survey, the desired sample size was achieved and is comparable to the 47.3% response rate achieved with the 2002 Canadian Contraceptive Study.<sup>33</sup>

## CONCLUSIONS

This study examined differences in knowledge and perceptions of ECP between younger and older women in Nova Scotia. The results suggest that women in NS, regardless of their age, are generally poorly informed with regards to information about ECP (such as how effective it is, timing of dose, how it works), as well as how to access Plan B®. Many women also believe that ECP is an abortifacient. To improve women's knowledge, efforts should be made to educate women about ECP and its availability. Such efforts should be sure to include older women, who were less well informed than younger women in some knowledge areas. It is also important to note that although women agreed that a pharmacist could be trusted in collecting their personal information, they were concerned about the level of privacy in community pharmacies. Pharmacists should take measures to ensure a woman's privacy when discussing EC in the pharmacy. Future research, including barriers from the perspective of others that may wish to access ECP (e.g. male partners of potential users), women under the age of 18, and health care providers may provide insight that will help improve accessibility of ECP.

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## CONFLICT OF INTEREST

No conflicts of interest to declare.

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