The Emergency Contraceptive Pill: Knowledge, Attitudes and Practices of Women in Barbados

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ABSTRACT

Objective: *The emergency contraceptive pill (ECP) is a prescription only drug in Barbados. Knowledge, attitudes and practices with regards to ECPs are uncertain.*
Methods: *Women aged 18–44 years attending three public sector polyclinics completed a questionnaire. Quota sampling was done in proportion to clinic size and age distribution of the Barbados population.*
Results: *Of 378 respondents (response rate 91%, median age 31 years), 86% were previously pregnant, 17, 22, 47 and 15% had 0, 1, 2−3 and ≥ 4 children respectively, 52% had used contraception at last intercourse, 26% would be happy if they became pregnant, 29% reported a termination of pregnancy, 43% were aware that ECPs existed and could be used to prevent pregnancy after intercourse and 14% had used ECPs. Of the 162 women who knew ECPs existed, 32% thought it needed to be used within one day. Women 36 to 44 years of age were less likely to have used ECPs than younger women (*$p = 0.03$*). Most users (66%) obtained the pill directly from a pharmacy without a prescription. After receiving information that the ECP exists, 243 women (64%) would or might use it if necessary, with 42% preferring to obtain it without a prescription from a pharmacy. Those concerned that ECPs caused abortions were less willing to use it compared to those who were not (30% vs 74%,* $p \leq 0.001$*).*
Conclusions: *Awareness and use of ECPs are low. Education on the mode of action and time limit for use and non-prescription access are needed.*

Keywords: Barbados, contraception, emergency contraception

La Píldora Anticonceptiva de Emergencia: Conocimientos, Actitudes y Prácticas de las Mujeres en Barbados

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RESUMEN

Objetivo: *La píldora anticonceptiva de emergencia (PAE) es un medicamento bajo prescripción en Barbados. Los conocimientos, actitudes y prácticas con respecto a las PAE son inciertos.*
Métodos: *Las mujeres de 18 a 44 años que acuden a tres policlínicos del sector público completaron un cuestionario. Se realizó un muestreo por cuota en proporción al tamaño de la clínica y a la distribución por edad de la población de Barbados.*
Resultados: *De las 378 encuestadas (tasa de respuesta 91%, edad promedio 31 años), 86% estuvieron previamente embarazadas, 17, 22, 47 y 15% tenían 0, 1, 2−3 y ≥ 4 niños, respectivamente; 52% habían usado anticonceptivos en la última relación sexual; 26% serían felices si lograran caer embarazadas; 29% reportó una interrupción del embarazo; 43% eran conscientes de que las PAE existían y podían ser utilizadas para prevenir el embarazo después del coito; y 14% habían utilizado las PAE. De las 162 mujeres que conocían de la existencia de las PAE, 32% creían que era necesario utilizarlas en el plazo de un día. Las mujeres de 36 a 44 años de edad tenían menos probabilidades de haber utilizado píldoras anticonceptivas de emergencia que las mujeres más jóvenes (*$p = 0.03$*). La mayoría de las usuarias (66%) obtuvieron la píldora directamente en una farmacia sin receta médica. Después de recibir la información de que existían las PAE, 243 mujeres (64%) las usarían o podrían usarlas si fuese necesario, prefiriendo un 42% obtenerlas sin receta médica en una farmacia. Las mujeres preocupadas porque las PAE pueden causar abortos estaban menos dispuestos a utilizarlas en compar-*

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ación con aquellas a quienes no les preocupaba (30% vs 74%, $p \leq 0.001$*).*
Conclusiones: *Hay poca conciencia sobre la existencia y el uso de las PAE. Se necesita educación sobre el modo de acción y tiempo límite de uso, así como posibilidad de acceso sin prescripción.*

Palabras claves: Barbados, contracepción, contracepción de emergencia

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INTRODUCTION

An unintended pregnancy can result from contraceptive failure or from failure to use any type of contraception due to unanticipated intercourse, a lack of planning or negotiation skills, or sexual assault. Pregnancy termination, raising a child or adoption may have to be considered, along with the social, personal, financial and health-related consequences.

In 2003, 3491 births and 432 terminations of pregnancy occurred at the Island's main hospital, the Queen Elizabeth hospital (1). Termination is permitted by law in Barbados (2). In addition to being available through the Queen Elizabeth Hospital, terminations are readily available through a number of private practitioners but the volume of such procedures is unknown. Few studies on contraception use in Barbados have been published. A general practice survey published in 1973 found that of 341 pregnancies, 82% were unplanned, 75% were unwanted and most women did not use any contraception at all (3).

Emergency contraception refers to any method of contraception used after intercourse and before implantation and is the last option to reduce the possibility of an unintended pregnancy after unprotected intercourse. To be effective, women first need to be aware that emergency contraception exists, find its use acceptable, know the time limit for use and be able to access it within the correct interval without significant barriers. The emergency contraceptive pill (ECP) regimen recommended by the World Health Organization (WHO) is 1.5 mg of levonorgestrel taken as a single dose within 120 hours of unprotected intercourse (4). Dedicated levonorgestrel-only ECPs are available in Barbados but by regulation, they are prescription only. In 2011, dedicated ECPs cost approximately US $10 to $15 from private pharmacies. Emergency contraceptive pills are not available through public sector polyclinic pharmacies and other barriers to use may exist. A survey of 194 healthcare workers in Barbados found that about half of the respondents believed that ECP use encourages sexual risk-taking and leads to increased STI transmission, 29% thought it induced abortion and only four to eight per cent were willing to provide the method in advance. The majority felt that it should be prescription only (5).

The objectives of this study were to determine the knowledge, attitudes and practices of women attending public sector polyclinics in Barbados to the ECP and to identify potential barriers to its use.

SUBJECTS AND METHODS

Sampling

A questionnaire was administered between May 2010 and March 2011 to a convenience sample of women aged 18–44 years attending three of the eight public sector polyclinics. These polyclinics accounted for 41% of public sector patient visits in 2003 (1) and span urban and rural communities. A quota sampling approach was used to ensure the sample was in proportion to clinic size and age distribution of the population. Based on the 2000 Census (6) the age quotas were as follows: 30% aged 18–26 years, 34% aged 27–35 years and 36% aged 36–44 years. Based on patient visits per year (1) clinic quotas were: Winston Scott Polyclinic 45%, St Philip Polyclinic 39% and Edgar Cochrane Polyclinic 16%. Women who were pregnant, attending the family planning clinic on the day of the survey and who had never been sexually active were excluded.

Women in the clinic waiting room were taken to a quiet area, given a brief description of the study and eligibility was determined. Eligible women were then given a more detailed description and invited to participate. Signed informed consent was obtained.

A sample size of 378 was chosen to show a prevalence of ECP knowledge or use of 50% with a 95% confidence interval of ± 5%.

The questionnaire was piloted among 20 women. These questionnaires were not included in the final study. It collected demographic data, reproductive history and knowledge, attitude and practices with respect to emergency contraception. After determining knowledge and use of ECPs, women were given the following information "*An emergency contraceptive pill is available to prevent unwanted pregnancy if taken up to five days after unprotected intercourse. It costs about $20 and has few side effects. In Barbados, you need a prescription from a doctor to get it, but in some countries, you can get it directly from a pharmacy*". Attitudes were then checked. The questionnaire consisted of a mixture of open and closed questions. It was interviewer administered except that the reproductive history section which was self-administered in an effort to reduce response bias.

Data were analysed using PASW statistics 18. Chi-square tests were used to test the significance of associations between categorical variables.

Ethical approval was obtained from the institutional review board of The University of the West Indies and the Ministry of Health, Barbados.

RESULTS

The response rate was 91%. The 378 respondents had a median age of 31 (interquartile [IQ] range 25 to 38) years, 66% were engaged in paid employment and 42% were married or were in a common law relationship (Table 1).

Table 1: Demographic characteristics of respondents

Characteristic	Number (%)
Age	
18–26	114 (30)
27–35	129 (34)
36–44	135 (36)
Highest education completed	
Primary*	49 (13)
Secondary	204 (54)
Further training	99 (26)
University	26 (7)
Religion	
Pentecostal	111 (29)
Anglican	82 (24)
Seventh day Adventist	25 (7)
Methodist	16 (4)
Roman catholic	15 (4)
Other	53 (14)
None	69 (18)
Partnership status	
No partner	67 (18)
Partner – not living together	151 (40)
Partner – common law	105 (28)
Partner – married	55 (14)
Employment status	
Paid employment	251 (66)
Student	25 (7)
Unemployed	102 (27)

*May have had some secondary education, but did not complete 5th form secondary school.

The median age of 31 non-responders from whom age was obtained was 36 years (IQ range 27 to 40). The main reason persons gave for declining participation was a lack of interest in contraception.

Reproductive history and attitude to becoming pregnant

Most (86%) were pregnant at least once, 45% were pregnant as teenagers and 83% had at least one child. Of those who had been previously pregnant, 34% (95% CI: 29, 39) reported having had a termination of pregnancy. The last pregnancy was unplanned in 35% of cases with women 36–44 years of age were more likely to report this than women in the younger age groups ($p < 0.001$). Some method of contraception was used at last intercourse by 52% (Table 2). For those who used contraception, the methods included condoms (54%), the pill (18%), an injection (10%), tubal ligation (9.3%) and an intrauterine device (5%).

Of 183 women who had not used contraception at last intercourse 31%, 29% and 40% would be happy, unsure of their feelings or disappointed/angry if they became pregnant compared to 21%, 40% and 40% of those who had used contraception ($p = 0.027$).

Knowledge and emergency contraceptive pill use

Only 162 women had heard of a pill that could be used after intercourse to prevent pregnancy. Many of these referred to it as the morning after pill, the day after pill, 24-hour pill, emergency contraceptive pill, or a pill. Of these women 52 (32%) felt that it had to be used within 24 hours, the morning after or within a few hours, 17 (11%) within 48 hours, 46 (28%) within 72 hours, six (4%) within 120 hours, nine (6%) a time period > 120 hours and 29 (18%) were unsure of the time limit. Only 14% (95% CI: 11, 18) of all women surveyed had used the EC pill and 66% of these had obtained it from a pharmacy without a prescription (Table 2).

Attitudes to the emergency contraceptive pill after being informed such a pill existed

After being informed that an ECP was available that could prevent an unwanted pregnancy after intercourse, 53% said that they would use it if necessary, with women who did not think it would be a form of abortion more likely to say that they would use it than those who had such concerns [$p \leq 0.001$] (Table 3).

Of the 189 women who did not consider the ECP a form of abortion 140 (74%) said that they would be willing to use it, but of these only 67 (48%) would still be willing to use it if it were, in fact, a form of abortion. Of the 243 women who said that they would use or were unsure of using the ECP, 42% would prefer to get it directly from a pharmacy without a prescription (Table 4).

DISCUSSION

Although almost half of the women surveyed had not used contraception at last intercourse, only 26% would be happy if they became pregnant in the next month. With 34% of previously pregnant women reporting having had a termination of pregnancy, these findings suggest that while contraception was being underused, many women were prepared to prevent an unwanted pregnancy from continuing. Far fewer women had used the ECP (14%) compared to those who had an abortion (29% of all women).

The low rate of ECP use is not surprising as only 43% were aware of it, and of those who were aware, a third thought use had a time limit of 24 hours or even less. Similarly, a 2006 survey of healthcare workers reported that 34% of general practitioners and 67% of obstetricians thought the time limit was within 24 hours (5). Even if aware of emergency contraception, a woman would have to make a decision to use the pill, make time available to visit a physician and then a phar-

Table 2: Reproductive history and emergency contraception pill knowledge and use by age group

		Age group			
Category Number (n) = 378 unless otherwise stated	**Number (%)**	**18–26 years number (%)**	**27–35 years number (%)**	**36–44 years number (%)**	***p* by Chi-squared**
Ever pregnant	324 (86)	75 (66)	118 (92)	131 (97)	< 0.001
Number of children					
0	65 (17)	47 (41)	13 (10)	5 (4)	< 0.001
1	84 (22)	38 (33)	27 (21)	19 (14)	
2–3	174 (46)	25 (22)	74 (57)	75 (56)	
> 4	55 (15)	4 (4)	15 (12)	36 (27)	
Last pregnancy unplanned* n = 324	112 (35)	16 (21)	35 (30)	61 (47)	< 0.001
Previous termination of pregnancy* n = 324	111 (34)	22 (29)	41 (35)	48 (37)	0.563
Sexually active within the last six months	300 (79)	89 (78)	103 (80)	108 (80)	0.919
Used contraception at last intercourse	195 (52)	64 (56)	64 (50)	67 (50)	0.508
Risk of unplanned pregnancy in next six months	67 (18)	24 (21)	31 (24)	12 (9)	0.003
Attitude to a pregnancy in the next month					
Happy	97 (26)	32 (28)	33 (26)	32 (24)	
Unsure	151 (34)	40 (35)	56 (43)	55 (41)	0.695
Disappointed/angry	130 (40)	42 (37)	40 (31)	48 (36)	
Heard of EC pills	162 (43)	52 (46)	67 (52)	43 (32)	0.003
Used EC pill	53 (14)	22 (19)	23 (18)	8 (6)	0.003
Source where EC pill was obtained (n = 53)					
Pharmacy with no prescription	35 (66)	18 (82)	(12 (52)	5 (63)	
Pharmacy with prescription	9 (17)	1 (5)	6 (26)	2 (25)	
Directly from a doctor	4 (8)	1 (5)	3 (6)	0 (0)	
Friends	5 (9)	2 (9)	2 (9)	1 (13)	

*Includes only those who were previously pregnant; EC: emergency contraception

Table 3: Willingness to use the emergency contraceptive pill in the future after being told that such a pill existed that could prevent unwanted pregnancy by concern about it being a method of abortion

	Willingness to use the ECP			
ECP mode of action	**Would use n (%)**	**Unsure if would use n (%)**	**Would not use n (%)**	**Total**
Not a form of abortion	140 (74)	9 (5)	40 (21)	189 (50)
Unsure	21 (40)	14 (26)	18 (34)	53 (14)
Form of abortion	41 (30)	18 (13)	77 (57)	136 (36)
Total	202 (53)	41 (11)	135 (36)	378 (100)

ECP: emergency contraceptive pill; $p \leq 0.001$

Table 4: Attitudes of those who would or were unsure about using the emergency contraceptive pill, n = 243.

Attitude	Number (%)
Would use without partner approval	
Yes	124 (51)
unsure	25 (10)
No	94 (39)
Preferred EC pill source	
Pharmacy without a prescription	102 (42)
Private doctor	86 (35)
Public sector polyclinic	55 (23)

macy, pay for the medication, and potentially be exposed to a judgmental healthcare workers. By the time these barriers can be overcome, the perceived time limit for ECP use might have elapsed resulting in a decision not to use it.

The ECP is a prescription only drug but 66% of women who used it reported accessing it directly from a pharmacy without a prescription and without seeing a physician. Direct access from a pharmacy has face validity as practising physicians receive reports in keeping with this from their patients. A previous study reported that 47% of 65 pharmacists surveyed in Barbados indicated that they had a request for ECPs at least twice a month and 89% had sold the product. However, only 40% of pharmacists and 18% of general practitioners felt that the ECP should be available without a prescription (5). It is, therefore, possible that not all women attempting to obtain the ECP from a pharmacy without a prescription are successful.

After being told about the ECP, 42% of those who said that they might or would use it preferred to get it directly from a pharmacy. Only 23% preferred to obtain it through a public sector polyclinic. The women surveyed were all attending a polyclinic and for many, this would be the usual place to access medical care. The reasons for preferring not to access the ECP through a polyclinic were not explored but could be related to the anticipation that direct access from a pharmacy would be more convenient than waiting to be seen in a busy clinic for an unplanned event for which time-off from work *etc*, might be difficult to arrange at short notice. Since the WHO states that "no medical contraindications to the use of levonorgestrel emergency contraception pills" (4) and advance provision leads to a reduction in unintended pregnancies (7–10) both over the counter provision and advance provision in Barbados should be considered.

With correct knowledge and no barriers to accessing ECPs, women still have to find the use of this method acceptable. A concern that the ECP was a method of abortion was associated with an unwillingness to use it. The finding in another survey (5) that 30% of general practitioners and 33% of pharmacists in Barbados cited abortion as a possible mechanism would mean that even if the woman consulted a health provider this concern may not be dispelled.

Stigma and the tendency to give a socially desirable answer may have led to an under-estimation of the termination of pregnancy rate. Findings from this study can only be extrapolated to the population from which the sample was drawn, in this case public sector primary care patients. Frequent attendees to clinic with chronic health conditions would be over-represented in the sample.

CONCLUSIONS

Many women are at risk from an unintended pregnancy and 1/3 reported a termination of pregnancy. The low rate of ECP use suggests that it is an underused method. Low awareness, concern among some women that it is a method of abortion and a lack of knowledge of the time limit for use would contribute to the low usage rate. Public education is needed to correct this and access can be improved by making the pill officially an over-the-counter medication.

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