Like Chocolate: Adolescent Emergency Contraception Use in Nairobi

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Introduction

In 2004 and 2005, the Kenyan media featured a set of reports alleging that an epidemic of emergency contraception (EC) abuse had emerged among adolescents in Nairobi. Fueling an already heated debate on reproductive rights in Kenya, both a newspaper article and a television news story suggested that open access to EC encouraged risky sexual behaviors among adolescents. According to the newspaper, young women in Nairobi were so regularly and repeatedly engaging in this risky behavior that they were "using [EC pills] like chocolate".

Although these stories were based on anecdotal evidence, they have nonetheless had an impact on the national policy debate. Despite the Ministry of Health's decision to integrate EC into the public sector contraceptive method mix, officials remain wary of a popular backlash because of its increasingly controversial nature. Not only has EC been tenuously linked to risky sexual behavior, but both locally and globally, it has also been incorrectly associated with abortion. This study assessed EC use and knowledge among adolescents in Nairobi in order to provide evidence to inform the current debate. The data from this assessment will help determine the extent of EC use among adolescents and provide initial insights into the relationship between access to EC and sexual risk-taking.

Objectives

- Identify the characteristics associated with young women's knowledge and use of EC in Nairobi, Kenya
- Determine linkages between contraceptive knowledge, sexual experience and knowledge or use of EC
- Assess how sexual risk perceptions affect knowledge and use of EC

Methods

The data for this analysis comes from a survey of females aged 14-25 conducted in Nairobi, Kenya in 2005. Three hundred respondents were included in the sample, with 100 from each of three sub-categories: secondary school students (ages 14-20), university students (ages 18-25), and females who were not currently in school (ages 14-25). The sample is non-random, with purposive sampling techniques used to sample for each group.

Each respondent completed a questionnaire designed to examine knowledge of EC, use of EC, and the perception of risk of pregnancy and STIs. The questionnaire also included questions on sexual activity.

Nine outcome variables were identified:

EC Use Outcome Variables

- Sexually active respondent identified she had used EC
- Respondent or someone she knew had used EC
- Respondent or someone she knew used EC more than once in the previous month
- Respondent reported where she or someone she knew purchased EC

EC Knowledge Outcome Variables

- Respondent was able to spontaneously name EC as a method of contraception
- Respondent named EC as a postcoital method of contraception
- Respondent when prompted had heard of EC
- Respondent reported where she first heard of EC
- Respondent gave accurate information when asked what she knew about EC

Independent variables are divided into four categories: demographic characteristics, sexual experience, contraceptive knowledge and use, and risk perception of pregnancy and STIs. Knowledge outcomes were examined in terms of demographic characteristics, knowledge of other contraceptive methods and sexual risk perceptions variables. Use of EC outcomes were examined in terms of demographic characteristics, sexual behaviors, and sexual risk perception variables.

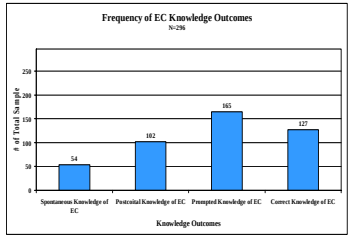
Analysis

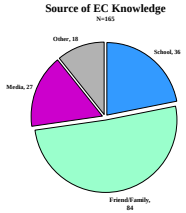
STAGE ONE: Pearson chi-squares were calculated between each of the 9 outcomes and the independent variables. Due to small sample sizes, three outcome variables (source of EC, repeat use within a single month, and self-reported use of EC) were excluded from further analysis at this stage.

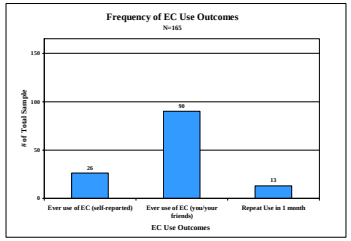
STAGE TWO: Unadjusted odds ratios were calculated between each of the remaining outcomes and the independent variables that showed a significant chi-square relationship in Stage One. For the 5 binary outcomes (spontaneous knowledge of EC, postcoital knowledge, prompted knowledge, correct knowledge, ever used EC- you/your friends) logistic regression models were fitted; for the one categorical variable (source of EC knowledge) a multinomial logistic regression was fitted.

STAGE THREE: Adjusted odds ratios were calculated. All the independent variables used in Stage 2 were fitted into a logistic regression model (multinomial for source of EC knowledge) for each of the outcomes.

Results







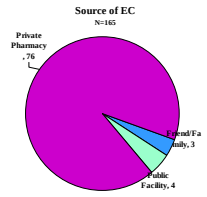


Table 1: Significant X^2 Associations for EC Knowledge Outcomes

Variables	Spontaneous EC Knowledge	Postcoital Knowledge	Prompted Knowledge	Source of Knowledge	Correct Knowledge
Age	X	X	X		
Educational Level	X	X	X		
Peers Sexually Active			X	X	
Sexually Active		X		X	
Abstinent		X	X	X	X
Ever Used Condoms	X		X		
Ever Used DMPA			X	X	
Condom Used at Last Sex			X		
Ever Been Pregnant	X	X			
Spontaneous Condom Knowledge	X	X	X		
Knowledge of Temporary Contraceptives	X	X	X		
Biggest Concern about Sex: Parents Finding Out		X			
Biggest Concern about Sex: STIs		X			
Biggest Concern about Sex: Partner's Happiness	X	X			
Perceived Risk of Pregnancy	X	X	X	X	X
Perceived Risk of STIs	X	X	X		
Perceived Risk of HIV			X		

Table 2: Significant X^2 Associations for EC Use Outcomes

Variables	Ever Used EC (self-reported)	Ever Used EC (you/your friends)	Repeat Use in Previous 1 month	Source of EC
Age	X	X		
Educational Level	X	X		X
Peers Sexually Active		X		
Sexually Active		X		
Abstinent		X		
Number of Partners			X	
Sex for Money/Gifts				X
Believes EC Protects Against HIV		X		
Prefers EC	X			
Biggest Concern about Sex: Partner's Happiness	X	X		
Perceived Risk of Pregnancy		X		
Perceived Risk of STIs		X		
Perceived Risk of HIV		X		

Results of Logistic Regression for Knowledge and Use Outcomes

Significantly Lowered the Odds Ratio for Spontaneous EC Knowledge:

* Out of School Youth (0.162)
*Parents Finding Out about Sexual Activity: Less Concerned (0.08)
*Parents Finding Out about Sexual Activity: No Response (0.039)
*Less Concerned about Pregnancy (0.041)

Significantly Changed the Odds Ratio for Correct EC Knowledge:

*Perceived Risk of STIs: Medium Risk (0.181)
*Perceived Risk of Pregnancy: No Risk (8.782)

Significantly Increased the Odds Ratio for Postcoital EC Knowledge:

*University Students (15.506)

Significantly Changed the Odds Ratio for Source of EC Knowledge (friends/family)

School:

*Out of School Youth (0.05)
*University Students (0.125)
*Abstinent (2.343)
*Perceived Risk of Pregnancy: No Risk (12.848)

Media:

*Peers Sexually Active (0.13)
*Ever Used DMPA (0.029)

Significantly Increased the Odds Ratio for EC Use Reported by You/Your Friends:

*Sexually Active (3.242)
*Ever Been Pregnant (2.473)

Significantly Increased the Odds Ratio for Prompted EC Knowledge:

*Spontaneous Condom Knowledge (2.769)
* Perceived Risk of STIs: Low Risk (6.699)

Conclusion

- EC knowledge and use is associated with age and education. Younger, less educated women are less likely to know or use EC. However, these women are also less likely to be sexually active.
- Friends and family are the most common source for information about EC, which may lead to miscommunication about the indication and mechanism of EC.
- Repeat use, which was of main concern in the media attention, appears to occur among a very small section of older (18-25) women and is certainly not the dominant pattern of EC use.
- Sexual risk perceptions have are associated with knowledge and use of EC. However, the connections between personal risk and use or non-use of EC need to be explored further.
- Although EC is widely available through public facilities in Kenya, little has been done to promote its use because of fear of backlash. However, this study shows that the availability of EC does not lead to increased sexual risk taking. Instead, EC is a vital component of preventing unintended pregnancies among all women including survivors of rape and incest.

Policy Recommendations

- Increased efforts are needed to educate adolescent women about EC. While most secondary school students are not sexually active they are prime targets for information about contraceptives with an emphasis on EC as back-up method.
- In a high HIV prevalence area like Nairobi, sexual risk taking is especially concerning. Young women need to be empowered to use condoms during sexual intercourse to decrease both the risk of STIs and the risk for unintended pregnancies.

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