



A Study on Knowledge and Use of Emergency Contraceptive Pills among Female Sex Workers of Ahmedabad

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ABSTRACT

Background: Female Sex Workers (FSWs) are at high risk for unintended pregnancy. One of the key interventions to reduce unintended pregnancy and unsafe abortion is availability of emergency contraception. The present study was conducted to assess the knowledge, attitude and practices regarding ECPs among FSWs of Ahmedabad as well as the hazards of overusing it.

Methods: A cross sectional community based study was carried out among 1023 FSWs in Ahmedabad during February 2014 to June 2014. FSWs were interviewed by systematic random sampling using a standard pre designed and pretested semi-structured proforma.

Results: Overall, 45.3% of the FSWs had ever heard of ECPs when asked directly and all of them mentioned ECPs by name spontaneously. Knowledge of ECP was independently associated with age, education, marital status, type of family and the socioeconomic status of the FSWs. Only 15.6% of FSWs had ever used ECPs.

Conclusion: The study pointed out the need for increasing the knowledge of FSWs about emergency contraception pills as well as making them aware about the hazards of overusing it.

Key Words: Emergency contraception, Emergency contraceptive pills (ECPs), female sex workers (FSWs), unintended pregnancy, unsafe abortion

INTRODUCTION

Unwanted pregnancies, are the most common cause of induced abortion around the world.¹ Unsafe abortion continues to be a serious public health matter and a major obstacle to reducing the high rates of maternal mortality in the developing world. On an average, roughly fifteen percent of maternal deaths in India are thought to result from unsafe abortion.² The lack of access to health services and modern contraception is one of the major causes of unwanted pregnancies. Another important cause of unwanted pregnancy is the lack of access to emergency contraception -also known as the *morning-after pill* or *post-coital contraception*. Although emergency contraception is now widely available in most developed countries, it is generally less known and less used by women in developing countries. India.³

According to 2011 statistics, there are 8.68 lakh sex workers in India.⁴ As per study conducted by J Vandepetite et. al the average prevalence of FSWs in four cities of India was 0.4%.⁵

FSWs are women of reproductive age, they are also at high risk for unintended pregnancy. This population faces all problems of motherhood specifically the risk of death & disability for both the mother & her new born child. A very low proportion of women sex workers were currently using a modern contraceptive method as evident from various studies conducted in India and abroad.^{6,7,8} The copper-bearing intrauterine device and emergency contraceptive pills (ECPs) are the only methods of pregnancy prevention that can be used post-coitally, following coerced or unplanned intercourse or contraceptive failure.⁹ By preventing unintended pregnancies, emergency contraception

prevents abortions.¹⁰ Emergency contraceptive pills offer women the chance to avoid unwanted pregnancy in cases where regular contraceptive methods have failed or incorrectly used.²

FSWs' contraceptives practices and reproductive health needs are under-researched. Sex workers have exposure to multiple sexual partners. Unwanted pregnancy is the outcome, if knowledge of ECP's is not there or contraceptive failure is there, which most often leads to unsafe abortion, which is responsible for roughly 15% of maternal deaths in India. Knowledge on emergency contraceptive particularly about the methods, dosage and time and its advocacy is inadequate among providers as well as potential users.¹¹

This group, should, therefore be well informed about the importance of ECP, their availability in Government set up and the time limit within which it may be used as well as the potential hazards of overusing it. There are few data regarding Use/ Abuse of ECP among sex workers, so the present study was conducted to assess the knowledge, attitude and practices regarding ECPs among FSWs of Ahmedabad as well as the hazards of overusing it during February 2014 to June 2014.

MATERIALS AND METHODS

A cross sectional community based study was carried out among FSWs registered with AIDS Control Society in Ahmedabad (Gujarat state). A sample size of 1023 FSWs was taken by purposive sampling. A pre designed and pretested semi-structured questionnaire was used for the survey. A team of two trained female field investigators interviewed the participants.

The field investigators visited the NGO's office where the list of hotspots was given to them. Then with the assistance of one person from NGO's office, the field investigators visited the hot spots where FSWs were available & with informed consent interviews were conducted in a private room for approximately 20 minutes.

Analysis: Data was entered in MS Excel and analyzed in SPSS 17.0. Odd's ratio, Chi-square test for association and regression analysis was applied.

Ethical Considerations: Ethical clearance had already been taken from the Ethical Committee of AMC MET Medical College/LG Hospital. Written & Informed consent of all participants was taken for participation in the survey

RESULTS

The socio-demographic characteristics of the women are presented in Table 1. The mean age of FSWs was 30.33±6.09 years.

Table 1: Socio-demographic characteristics of FSWs

Variables	FSWs (N=1023) (%)
Age (Mean ± SD)	30.33±6.09
Marital status	
Married	778 (76.1)
Unmarried	75 (7.3)
Widow	126 (12.3)
Divorcee	15 (1.5)
Others	29 (2.8)
Religion	
Hindu	932 (91.1)
Muslim	84 (8.2)
Sikh	1 (0.1)
Christian	5 (0.5)
Others	1 (0.1)
Occupation	
Sedentary	24 (2.3)
Moderate	998 (97.6)
Heavy	1 (0.1)
Education	
Illiterate	352 (34.4)
Just literate	291 (28.4)
Primary	241 (23.6)
Secondary	96 (9.4)
Higher Secondary	31 (3)
Graduate	12 (1.2)
Type of family	
Nuclear	203 (19.8)
Joint	820 (80.2)
Socio-economic status	
I	425 (41.5)
II	389 (38)
III	161 (15.7)
IV	45 (4.4)
V	3 (0.3)
History of Abortion	
Yes	405 (39.6)
No	618 (60.4)

Only 13.6% of FSWs had attained a high level of education, 76.1% were married, 97.6% were moderate workers, 91.1% were Hindus, 80.2% lived in joint families ,41.5% were from Socio-economic class I. Only 39.6 % of FSWs s had history of abortion. Presented in Table 2 are FSWs' awareness, knowledge and usage of emergency contraceptive pills (ECPs). Four hundred and eight women (39.9%) had awareness on ECPs, from which 33.8% said they got the awareness from a friend and 4.7% from the radio/TV. About 96% of those who had awareness on ECPs, knew the correct time-frame for an effective use of ECPs to prevent pregnancy recognizing the need to take the first dose within 72 hours after having unprotected sexual intercourse. As presented in Table 2, 66.4% of those aware of ECPs said they would use ECP in case of unprotected sex; 56.1% and 34.1% chose the options that that ECPs can be used in case of breakage of a condom during sexual intercourse and forced sex.

Table 2: Knowledge about emergency contraceptives among female sex workers

Variables	FSWs (n=1023) (%)
Ever heard about ECPs	408 (39.9)
Source of information	FSWs (n=408) (%)
Doctor	17 (4.2)
Friend	137 (33.8)
Radio/TV	19 (4.7)
Newspaper/ Magazine	0 (0)
Others	54 (13.2)
Indication for ECP use*	
Unprotected sex	271 (66.4)
Condom tear or misplaced	229 (56.1)
Forgot 2-3 OCPs	22 (5.4)
Forced sex	139 (34.1)
Others	12 (2.9)
Time of use	
24 hour	0 (0)
48 hour	0 (0)
72 hour	390 (95.6)
Don't know	18 (4.4)
Source of procurement of ECPs*	
Government Hospital	108 (26.5)
Medical Store	408 (100)
Friend	6 (1.5)
Private Doctor	3 (0.7)
Partner	10 (2.4)
NGO	4 (1)
Others	2 (0.5)
Ever used ECPs	
Yes	64 (15.6)
No	344 (84.3)
Reasons for ECP Use	
Non use any contraceptives	50 (78.1)
Contraceptive failure	11 (17.2)
Others	12 (18.7)

With regards to the usage of ECPs, 15.6% (n = 64) of the women had ever used ECPs, and they used it due to non use of any other contraceptive (78.1%, n = 50) and contraceptive failure (17.2%, n = 11). (Table 2).

Chi-square test was applied to identify factors associated with the knowledge of ECPs and presented in Table 3. FSWs within age group of 15-30 years had 2.21 times the odds of having more knowledge of ECPs as compared to FSWs who were in age group 31-49 years. Other factors that were found to be associated with the knowledge of ECPs were education (Crude OR = 5.87, 95% CI = 2.90 - 11.88, p = 0.00), number of family members (Crude OR = 1.54, 95% CI = 1.10 - 2.15, p = 0.01). Table 3

The result of Table 4 shows that predictor Age, Education Type and Family are significant for the

predicting knowledge ECPs among female sex workers.

DISCUSSION

This is the first survey concerning awareness and attitudes toward ECPs among Female Sex Workers in Ahmedabad. The results revealed that awareness of ECPs among this section of the public was very low (39.9%) This finding is lower than the study conducted in Nepal¹² but higher than the studies in other developing countries including Kenya¹³ and India¹⁴. Also, it was higher than study conducted in Vientiane City, Lao where 22.4% of women knew about ECPs.¹⁵

The use of ECPs is low but is slightly higher than the findings of studies in different parts of Ethiopia.^{16,17,18} In light of the HIV epidemic, increasing emphasis is being placed on the promotion of condom use, especially among FSWs. Because EC is advocated as a back-up contraceptive method for condom failure or non-use, it was concerning to find that EC awareness was low among this group.

Majority of the respondents got the service from pharmacy and only less than a quarter from government institution which is similar to the study done in Uganda.¹⁹

contrast to several studies,^{19,20} the most important source of information on ECPs in this study were friends, rather than health personnel and other sources such as radio, TV, magazine and other means and this is in accordance with previous studies.^{18,21} The information on ECPs is relatively simple to provide through an informal network, and in the light of this finding, information about ECPs could be disseminated through peer education. However, informal sources of information can easily lead to misinformation; while medical and media sources are associated with more accurate information. Thus, it is essential to train peers in order to increase ECPs awareness more accurately. Particularly, there is a need to provide information on the existence of ECPs, and the availability of the same at the public and private sector. Another important finding of this study was that, about 96% of the participants who had awareness on ECPs were able to determine the correct time frame for using ECPs. In This is higher than the 85 % reported among reproductive age women in Ghana²⁰ and 18% in University students in Nigeria.²² In agreement with several findings we found that participants said they would use ECPs in cases of , unprotected intercourse, and failed regular methods.^{12,15,20} This finding was also confirmed by the reasons participants gave for using ECPs which included prevention of unwanted pregnancies and unsafe abortions.

Table 3: Unadjusted (crude) associations with awareness of emergency contraception pills among Female sex workers of Ahmedabad, Gujarat (N=1023)

Variables	Knowledge of FSWs on ECP		p value	Odds Ratio (95% CI)
	Yes (n=408) (%)	No (n=615) (%)		
Age				
15-30	278(68.1)	302(49.1)	<0.01	2.21(1.71,2.88)
31-49	130(31.9)	313((50.1)		
Education				
Low	213 (52.21)	430 (69.92)	<0.01	5.87(2.90,11.88)
Medium	163 (39.95)	174 (28.29)		
High	32 (7.84)	11 (1.79)		
Marital Status				
Married	298 (73.04)	480 (78.05)	0.02	1
Unmarried	41 (10.05)	34 (5.53)		
Others	69 (16.91)	101 (16.42)		
Religion				
Hindu	368 (90.2)	564 (91.71)	0.54	0.97(0.81,1.16)
Muslim	36 (8.82)	48 (7.8)		
Others	4 (0.98)	3 (0.49)		
Occupation				
Sedentary	7 (1.72)	17 (2.76)	0.27	0.61(0.25,1.48)
Moderate	401 (98.28)	598 (97.24)		
Type of Family				
Nuclear	66 (16.18)	137 (22.28)	0.017	0.67 (0.49,0.93)
Joint	342 (83.82)	478 (77.72)		
Family Members				
<=5	347 (85.05)	484 (78.7)	0.01	1.54(1.10,2.15)
>5	61 (14.95)	131 (21.3)		
Socio-Economic Status				
I+II	337 (82.6)	477 (77.56)	0.051	1.37(0.99,1.89)
III+IV+V	71 (17.4)	138 (22.44)		
Migration				
Yes	113 (27.7)	146 (23.74)	0.154	1.23(0.92,1.64)
No	295 (72.3)	469 (76.26)		

p values are calculated from chi-square test

Table 4: Logistic regression predicting knowledge of ECP (n=1023) from Age, Education and Family type

Predictor	B	Wald	P	Adjusted OR (95% CI)
Constant	0.414	0.128	0.721	1.513
Age*	0.072	31.372	0.000	1.07(1.05,1.10)
Education*	-0.366	34.404	0.000	0.69(0.61,0.79)
Religion	-0.118	0.406	0.524	0.89(0.62,1.28)
Occupation	-0.242	0.259	0.611	0.79(0.31,1.99)
Marital Status	-0.009	1.348	0.246	0.99(0.98,1.01)
Family Type*	-0.606	5.394	0.020	0.54(0.32,0.89)
Family Members	0.044	0.592	0.442	1.04(0.93,1.17)
Socioeconomic Status	0.026	0.074	0.786	1.026(0.85,1.24)
Migration	0.144	0.788	0.375	1.15(0.84,1.59)

*Mentioned predictor is significant in logistic regression equation

CONCLUSION & RECOMMENDATION

Knowledge of ECP among all FSWs was independently associated with age, education and number of family members of the FSWs. Glaring gaps in knowledge of FSWs was observed among knowledge of FSWs in relation to ECPs which need attention.

The findings of the present study suggest that imparting health education to target group on continuous basis & transmitting priority messages on TV in relation to various aspects of ECPs and removal of misconceptions must be incorporated & intensified in Information Education Communication IEC campaigns of ECPs. Interaction of medical & paramedics professionals should be promoted to eliminate apprehensions & misconceptions & to give correct information to them about ECPs.

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