Original Article -

Contraceptive Practices and Awareness of Emergency Contraceptive Pills among Rural Women of Reproductive Age

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Abstract

Background: Regular contraceptive use and emergency contraception are tools to prevent population explosion. Objective: To assess the contraceptive practices and awareness of emergency contraceptive pills among rural women of reproductive age. Methods: The cross sectional study is conducted over 3months (December 2021 to February 2022) among 345 women of reproductive age (15-49 years) who living with their husbands in selected rural residence at Mostafapur village under Sadar Upazilla in Cumilla district. Women who were pregnant, had a child younger than 2 years, or had any physical & psychological disorder were excluded. Participants are selected by convenience sampling technique, data are collected by face to face interview with a semi-structured questionnaire to assess socio-demographic characteristics, contraceptive practices and awareness of emergency contraceptive pills. Data are analysed by SPSS software. Results: In this study, majority (48.7%) of the participants are in the age group 25-34 years. Most of them are housewives (92.2%) and 33.0%has secondary education. The mean (\pm SD) monthly family income of the participants is 25463.77 (\pm 15971.158) tk and 58.3% of the participants has 1-2 children. About the current practice of contraceptive method, 52.2% of the participants practice and OCP is the widely used method (58.3%), 44.40% take decision by both husband and wife. About reasons for using contraceptives, majority (38.3%) of them use due to spacing of birth and 27.2% cases do not use due to husband disapproval. Regarding awareness of ECPs, 55.9% of them aware of and Norpill is the widely heard method (20.7%). 27.4% of the participants' source of information is frommedia: TV/Radio. About correct time of taking ECPs, 33.60% of them have no knowledge. Regarding conditions where ECPs are to be taken, majority 39.7% of them have no knowledge. About benefits of taking ECPs, majority (79.30%) of them know it can prevent pregnancy. Conclusion Contraceptive practices and awareness of ECPs are not satisfactory among rural women. So national wide campaign program should be conducted to improve this field.

Keywords: Contraceptive practices, Rural women of reproductive age, Emergency contraceptive pills.

Introduction: In Bangladesh, population explosion is the major problem, which emphasis on the awareness and practice of contraceptive methods both rural as well as urban people. Contraception is one of the major determinants of fertility levels. As majority of people still live in rural areas thus this populations are the major part of any program to find out the real situation of our country. The history of successful family planning in Bangladesh started in the early 1960s, when Bangladesh was an eastern province of Pakistan¹. Family planning services in Bangladesh are

still developing and there are some advances in the health indicators but the need for family planning which cannot be met still stands out as an important health problem².

Family planning is defined by WHO as, "a way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of family groups and

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Received date: 11 August 2022 Accepted reviewed version date: 12 December 2022 thus contribute effectively to the social development of a country"³. Contraceptive use plays a significant role in controlling fertility, particularly in reaching the replacement level of fertility. In Bangladesh now population is 159,453,001 (July 2018 est.). TFR in Bangladesh is 2.15 children born/woman (2018 est.) and CPR is 62.3% (2014 est.)⁴. Contraception is unique among medical interventions for effective means of FP and fertility control and therefore very important in promoting maternal and child health⁵.

Many women, during the reproductive period are aware about family planning using different methods in the form of Oral Contraceptive Pills (OCP), or intrauterine devices (IUDs), or safe periods or other methods⁶⁻⁸. Ideally, family planning programs should offer a wide range of methods and appropriate counselling, so that users can make an informed choice and easy access to quality follow-up services since these factors are associated with method satisfaction, continuation and switching. Evidence from different studies has a number of programmatic implications, including better monitoring and evaluation of program activities, effectiveness in meeting the needs of users, and more generally, improved ability of governments to achieve goals set for total fertility, and for maternal and child health services9.

Emergency contraception (EC) refers to postcoital contraceptive methods that are used after unprotected sexual intercourse, to prevent unwanted pregnancy¹⁰. Unwanted pregnancy is a significant public health issue and poses a major challenge to the reproductive health of women. The World Health Organization estimated nearly 21,600,000 unsafe abortions took place in 2008, almost all in developing countries with restrictive abortion laws¹¹. According to Bangladesh Demographic and Health Survey (BDHS) 2014, women still have 11% of children more than they desire in Bangladesh and an estimated 1.194 million induced abortions performed in Bangladesh, and most were unsafe. EC is globally considered as a means to avoid unwanted pregnancy, unsafe MR, and unsafe abortion in the context of Bangladesh¹².

Emergency contraceptive pills are mostly hormone-based regimens consisting of combination of ethinyl estradiol with levonorgestrel and levonorgestrel alone. Previously ECPs were considered to be effective only within 72 hours after

unprotected intercourse but recent studies have indicated some ECPs are effective for upto 120 hours¹⁰. Although success of the family planning program and practice of contraceptives in Bangladesh has been widely acclaimed, many challenges still remain. Several demand-and supply-side strategies can help to overcome these challenges. At the same time, a renewed commitment from government bodies to implement and monitor such strategies, as well as to maintain ongoing collaboration with independent organizations is needed¹³.

Unmet need varies with increasing age and area of residence. Women aged 15–19 had 10% more unmet need than women aged 45–49 (17 and 7%, respectively). Similarly, rural women had a higher unmet need than urban women (13 and 10%, respectively)¹⁴.

The present study deals with one of the most important issue of our country. So, mass media, adult-education, and school curriculum need to be used to motivate people to value children irrespective of their sex, to highlight the benefits of small family size, and the important role of girls in the family as well as in the society. Inter-spousal communication should be encouraged during family planning counselling of couples to influence men's desired family size and contraceptive method use¹³.

METHODS AND MATERIALS

The cross-sectional study is conducted over 3months (December 2021 to February 2022) among 345 women of reproductive age (15-49 years) who were living with their husbands in selected rural residence at Mostafapur village under Sadar Upazilla in Cumilla district. Women who were pregnant, had a child younger than 2 years, or had any physical & psychological disorder were excluded. Participants are selected by convenience sampling technique; data are collected by face to face interview with a semi-structured questionnaire to assess socio-demographic characteristics, contraceptive practices and awareness of emergency contraceptive pills. Data are analysed by SPSS software. Descriptive analysis was done by mean, frequency, standard deviation, percentage in table.

ETHICAL IMPLICATIONS:

Permission was taken regarding data collection from local administrative authority. Each participant was

informed about the study, assured and informed written consent was taken. All participants were treated equally, secretly and with respect. All participants were assured that all information would be kept confidential and would not be used for any other purpose except research following standard guideline. The purpose of the study was explained to the participants without any distortion.

LIMITATIONS OF THE STUDY:

The main limitation is the small sample size and the representativeness of the sample. Validity of responses provided by participants on a sensitive issue like emergency contraceptive pills cannot be guaranteed. Some of the rural women were reluctant to participate in the interview because there was no monetary benefit, but their information could have enriched our research report.

RESULT:

Socio-demographic characteristics:

The socio-demographic characteristics are shown in Table 1. Majority of the women 168(48.7%) were age group between (25-34) years with the mean age of 29.86± 6.792. 114(33.0%) had Secondary education, 12(3.50%) were completely illiterate and the same 12(3.50%) got informal education. Regarding occupation, 318(92.2%) were house-wives, 181 (52.5%) had an income between 5000- 20000 taka and 201(58.3%) had less than 2 children.

Table 1: Socio-demographic characteristics of the respondents (n=345)

| Variable | Frequency | Percentages (%) |
|----------------------------|-----------|-----------------|
| Age (Years) | | |
| 15-24 | 78 | 22.6 |
| 25-34 | 168 | 48.7 |
| 35-49 | 99 | 28.7 |
| Educational status | | |
| Illiterate | 12 | 3.50 |
| Informal education | 12 | 3.50 |
| Primary | 28 | 8.10 |
| Secondary | 114 | 33.00 |
| S.S.C/Equivalent | 101 | 29.30 |
| H.S.C/Equivalent | 50 | 14.50 |
| Graduation/Equivalent | 21 | 6.10 |
| Post-graduation/Equivalent | 7 | 2.00 |

| Occupational Status | | |
|--------------------------|-----|-------|
| Housewife | 318 | 92.20 |
| Service | 17 | 4.90 |
| Student | 7 | 2.00 |
| Business | 3 | 0.90 |
| Monthly income (in taka) | | |
| 5000-20000 | 181 | 52.5 |
| 20001-40000 | 115 | 33.3 |
| 40001-60000 | 40 | 11.6 |
| 60001-80000 | 9 | 2.6 |
| Number of children | | |
| None | 15 | 4.3 |
| 1-2 | 201 | 58.3 |
| 3-4 | 120 | 34.8 |
| 5-6 | 8 | 2.3 |
| 7-8 | 1 | 0.3 |

Contraceptive practices:

Table -2 shows information regarding contraceptive practices. Among the total participants, majority i.e. 180 (52.2%) of the practiced contraceptives and rest (47.8%) did not practiceOut of total practicing participants contraceptive (n=180),maximum 105(58.3%) used OCP followed by condom 39(21.7%) and only 9(5.0%) undergone tubal ligation. In 80(44.40%) cases both the husband and wife took the decision regarding the choice of contraceptive use. 95(38.30%) of the participants were using contraceptives for birth spacing followed by 84(33.90%) to complete their families and in 52(27.20%) cases women didn't use contraceptive method due to husband's disapproval (n=165).

Table 2: Contraceptive practices

| Variable | Frequency | Percentages (%) |
|--|-----------|-----------------|
| Current practice of contraceptive method | | (n=345) |
| Yes | 180 | 52.2 |
| No | 165 | 47.8 |
| Method of contraception used | | (n=180) |
| OCP | 105 | 58.3 |
| Condom | 39 | 21.7 |
| Injection | 21 | 11.7 |
| Implant/Norplant | 3 | 1.70 |
| Copper-T | 3 | 1.70 |
| Tubal ligation | 9 | 5.00 |

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| Deciding member for use of particular method | | (n=180) |
|--|----|---------|
| Self | 49 | 27.20 |
| Husband | 31 | 17.20 |
| Both | 80 | 44.40 |
| Health worker | 20 | 11.10 |
| Reasons for using contraceptive* | | (n=180) |
| Complete their families | 84 | 33.90 |
| Spacing of birth | 95 | 38.30 |
| Improvement of health | 21 | 8.50 |
| Economical problem | 7 | 2.80 |
| Husband approval | 41 | 16.50 |
| Reasons for not using contraceptives* | | (n=165) |
| Husband disapproval | 52 | 27.20 |
| Economical problem | 05 | 2.60 |
| Religious belief | 20 | 10.50 |
| Fearing side effect | 45 | 23.60 |
| Son preference | 21 | 11.00 |
| Family pressure | 07 | 3.70 |

^{*}Multiple responses

Awareness of emergency contraceptive pills (ECPs): Table – 3 presents participant's awareness of emergency contraceptive pills. 193(55.9%) had awareness on ECPs, among the participants who are aware of ECPs, 62(20.70%), 57(19.00%), 54(18%) had heard the name of Norpill, Emcon and Peuli respectively (n=193). 87(27.40%) said they got information from TV/Radio, 82(25.80%) from health personnel and relative & friends. About 64(29%) knew ECPs should be taken within 72 hours and only 9(4.1%) knew within 5 days of unprotected sex. About 70(29.90%) said they would take ECPs in case of failure to follow regular methods, 45(19.20%) and 9(3.80%) choose the options that ECPs can be taken in case of condom breakage and after rape respectively. Regarding benefits of ECPs, the participants had greater recognition to prevent pregnancy, 175(33.1%), knew that ECPs can not cause abortion. 192(79.30%), 161(30.5%) knew ECPs cannot prevent HIV/AIDS.

Table 3: Awareness of emergency contraceptive pills (ECPs)

| Variable | Frequency | Percentages (%) |
|-------------------------|-----------|-----------------|
| Heard/ aware about ECPs | | (n=345) |
| Yes | 193 | 55.9 |
| No | 152 | 44.1 |

| Heard about trade names* | | (n=193) |
|--------------------------------|-----|---------|
| Emcon | 57 | 19.00 |
| I-pill | 43 | 14.30 |
| Norpill | 62 | 20.70 |
| Norix | 45 | 15.00 |
| Peuli | 54 | 18.00 |
| Don't know | 39 | 13.00 |
| Source of information* | | (n=193) |
| Media: TV/Radio | 87 | 27.40 |
| Health personnel | 82 | 25.80 |
| Family planning worker | 41 | 12.90 |
| Relatives & friends | 82 | 25.80 |
| Husband | 26 | 8.20 |
| Correct time of taking ECPs* | | (n=193) |
| Within 72 hours | 64 | 29.0 |
| To be taken daily | 52 | 24.0 |
| When menstrual cycle is missed | 22 | 10.0 |
| Within 5 days' sexual activity | 9 | 4.1 |
| Don't know | 73 | 33.00 |
| Conditions of taking ECPs* | | (n=193) |
| After rape | 9 | 3.80 |
| When condom breaks | 45 | 19.20 |
| Forget to take pill | 70 | 29.90 |
| Undue pressure from husband | 16 | 6.80 |
| Don't know | 93 | 39.70 |
| Benefits of taking ECPs* | | (n=193) |
| Can prevent pregnancy | 192 | 79.30 |
| Cannot prevent HIV/AIDS | 161 | 30.5 |
| Can not cause abortion | 175 | 33.1 |
| *Multiple responses | | |

Discussion:

Contraceptive practices and awareness of emergency contraception was studied among rural married women of reproductive age group (15-49) years. In the present study most of the studied women (48.7%) were in the age group 25-34 years with a mean value 29.86±6.792 years. 114(33.0%) women had Secondary education and 52.5% had an income between 5000- 20000 taka. Majority 318 (92.2%) were house-wives which is almost similar to a study conducted by in Mangalore, India which reported that 69.5% of the studies population were housewives¹³. The parity among 58.3% women was

1-2 with a mean (\pm SD) of 2.22 (\pm 1.114) which is inconsistent with another study in Karachi¹¹. Now family planning method has been reached to every rural area with the help of our government as well as private sector and peoples are now more conscious about planning a family. So, now majority of family prefer to 1-2 children. The study showed that 52.2% of participants practiced contraception which is lower as compared to another study in Mangalore which showed user proportion of contraceptive 71.25%13. Regarding type of contraceptive methods in users, OCP was the most common method of contraception which was used by 58.3% of the participants which is almost similar to another study conducted by among currently married women in Bangladesh¹². Our study reveals that about half of the couples (44.4%) took decisions by themselves which is almost similar (41.45%) to another study conducted in Mumbai, India14.38.3% of the participants used contraceptives for spacing of birth followed by 33.9% to complete their families, 16.5% used due to husbands approval which do not correlate with another study done in Bangladesh that showed 5.71% and 15.71% women used contraceptives for birth spacing and due to husbands approval respectively¹⁵. Regarding reasons for not using contraceptives, 27.2% of the participants did not use contraceptives due to husband's disapproval which does not correlate withanother study in Bangladesh (7.43%)15. 23.6% said they didn't use contraceptives fearing of side effects which is higher than other studies in Bangladesh and Nagpur, India that is 18% and 2.1% respectively^{15, 16}.

This study reveals information related to awareness of emergency contraceptive pills. majority i.e. 55.9% participants heard about ECPs which is higher than among currently married women in Bangladesh (14%) and lower than among college students in south India (85.5%)12,17. In this study, 27.40% of the participants got information from media: TV/Radio which is lower than a study conducted in India where 77.9% of college student's source of information was television¹⁷.

The correct time frame for contraceptive use was seen to be lower in comparison to previous studies. 29.0% knew ECPs should be taken within 72 hours of unprotected sex which is lower than study conducted

in Ghana 85%10 and higher than a study in Lao 7.9%18. 4.1% participants knew ECPs should be taken within 5 Days of sexual activity which is inconsistent with a study conducted among college students in India 54.4 %17. This may be due to lack of knowledge of family planning and contraceptive methods among rural women. 39.7% of the participants had no knowledge regarding correct time of taking ECPs, which is almost similar to women who were aware of ECPs in Ghana (50.0%)10. 9(3.8%) knew ECPs are to be taken after rape which is lower than the study in Ghana (17.4%)10. Regarding benefits of taking emergency contraceptive pills, 192 (79.30%) of the participants knew emergency contraceptive pills can prevent Pregnancy which is a bit lower than the study in Lao which reported 88.6% women knew emergency contraceptive pills can prevent Pregnancy¹⁸.

CONCLUSION:

In this study it is observed that the level of contraceptive practices and awareness of emergency contraceptive pills are relatively low. So, this study provides information that further evaluation is needed in this field specially about awareness of emergency emergency contraceptive pills to achieve our goal of population stabilization in Bangladesh. Efforts should be focused on providing health education through personal communication, films, posters, newspaper articles, folk dramas, radio & television programs and group meetings regarding contraceptive practices and awareness of ECPs to the rural women. Inter-spousal counselling to adopt contraceptive methods and discourage of preference for son through campaign programs and awareness rising activities should be implemented at community and national level.

CONFLICT OF INTEREST:

There is no conflict of interest among the authors.

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