

ORIGINAL ARTICLE

EMERGENCY CONTRACEPTION: AN OVERVIEW AMONG USERS

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**Background:** Emergency contraception Pills (ECP) provides a safe and effective means of post coital treatment and prevents at least 75% of expected pregnancies resulting from unprotected intercourse. The purpose of the study was to assess the awareness regarding emergency contraception and to see the knowledge attitude and preference about emergency contraception. **Methods:** This was a descriptive cross sectional study carried out at Combined Military Hospital (CMH) Khuzdar. A total of 200 married women of reproductive age group who agreed to participate in the study were interviewed using a self-reported comprehensive, structured closed ended questionnaire. **Results:** 77% of the women were practicing some contraceptive method at the time of study. Most were using condoms for contraception. 16% of all respondents have never used any contraceptive in their life. 70% believe that religion of Islam is not a barrier in family planning. Only 7.5% of the women were aware about ECP. **Conclusion:** Knowledge about ECP is poor among the women of child bearing age. There is a room for improvement regarding the awareness and use of ECP which can contribute to prevention of unwanted pregnancies.

**Keywords:** Family planning, safe period, Prevalence, contraceptive

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INTRODUCTION

Emergency contraception is defined as the use of drugs or devices to prevent pregnancy within a few days of unprotected intercourse.<sup>1,2</sup>

It is sometimes referred to as “Morning after, or post coital contraception. Emergency contraception provided a safe and effective means of post coital treatment and has been estimated to prevent at least 75% of expected pregnancies resulting from unprotected intercourse.<sup>3</sup>

Pakistan’s population growth rate 2.1% is very high as compared to 0.1% for more developed countries and 1.6% for less developed countries.<sup>4</sup> Because of high fertility, the age structure of our population is young comprising 41% of children under age fifteen years. Because of rapid population growth, poverty is wide spread in the country, with poorest 40% of the households spending US \$ 100 or less per year.<sup>5</sup> Although fertility rates have declined somewhat, the decline has been slow, especially among the poor, relative to that in other South Asian countries.<sup>6</sup> The need of family planning in this country can hardly be over-emphasized. The family planning programme receives minimum share in the overall government budget, i.e., only 1% of the total funding, if it is compared with other public sector programmes.<sup>7</sup>

Almost every woman of reproductive age who is sexually active and fertile and wishes to prevent unintended pregnancy after unprotected intercourse can use emergency contraception.<sup>8</sup>

As long as condoms continue to Slip or break diaphragms and cervical caps move out of place, pill-users forget to take their tablets regularly,

there will be need for use of emergency contraception. Emergency contraception is useful for women using withdrawal occurred too late or for the women practicing the rhythm or calendar method with any miscalculation of the “Safe” days for periodic abstinence.

The yuzpe regimen has been the most commonly used method of emergency contraception. It consists of two doses of a combination of 100 ug of ethinyl estradiol and 500 ug of Levonorgestril, the first dose taken within 72 hours of intercourse and the second dose 12 hours later.<sup>9</sup> The common side effects associated with this regimen are nausea and vomiting of which up to 50% and 20% respectively, have been reported.<sup>10</sup>

The levonorgestril regimen consists of two doses of 0.75 mg levonorgestril taken 12 hour apart starting within 72 hrs of unprotected intercourse. A recent, randomized, controlled trial by the World Health Organization (WHO) has shown that this regimen was better tolerated and more effective than the yuzpe regimen.<sup>11</sup>

The copper-bearing intrauterine device is a highly effective post coital contraceptive with failure rates of less than 1%.<sup>3</sup> It is used for up to 5 days after unprotected intercourse and is particularly appropriate for women who wish to use the device as a long-term method of contraception.

Mifepristone (RU 486) is highly effective as an emergency contraception and the regimen consists of a single dose of 600 mg given within 72 hrs of unprotected intercourse.<sup>10</sup> The WHO multicentre randomized trial to assess the safety and effectiveness of lower dose of mifepristone (50 mg and 10 mg) showed that reducing the dose did not decrease its

efficacy and was associated with less disturbance of the menstrual cycle.<sup>12</sup>

The new interest in emergency contraception should dispel the myths and misunderstandings. Providers will become better informed and may start, proactively, to inform their clients.

The development of more effective and better tolerated methods (such as levonorgestrel) will inevitably lead to preparations becoming available without the need to see a doctor, this will further enhance awareness and knowledge which should result in greater use. Knowledge, attitudes and practices toward emergency contraception among potential users is better in industrialized countries as compare to non-industrialized countries.<sup>13</sup> Less developed countries will probably follow the example of industrialized countries.

## MATERIAL AND METHODS

This was a descriptive cross sectional study was conducted at department of obstetrics and gynaecology in Combined Military Hospital (CMH), Khuzdar.

All the married women attending obstetrics and gynaecology during the study period and fulfil the study criteria, were asked to participate, while all those women married during last 1 year were excluded. A total of 200 otherwise healthy women agreed and were asked to fill the questionnaire regarding their personal data and contraceptive practices after obtaining informed consent. The data was collected and processed with full confidentiality. Statistical analysis was performed using SPSS version 16.00. Descriptive statistics was used to describe the data, i.e., mean±SD for numerical variables and percentages for categorical variables.

## RESULTS

Three hundred and sixteen women attended Gynaecology out-patient department during the study period. Out of these 266 women fulfilled the study criteria and were asked to participate in the study. 200 women agreed and responded to our questionnaire. Out of them only 15 (7.5%) knew about emergency contraception and 185 had no idea about emergency contraception. Hundred percent were Muslims. The place of origin was Urban in 61% cases, while 39% belonged to rural areas.

Age of respondents ranged from 23 years to 44 years with a mean age of 28 years, whereas their age at the time of marriage ranged from 19–8 years. Out of them 58% were illiterate ladies. 19% had primary education, 10% had middle education and 13% had secondary or higher education, 134 (67%)

of the respondents were house wives and 66 (33%) were working ladies.

One hundred-fifty four (77%) of the respondents were currently using contraceptives while 16% of the non-users never used any contraceptive. Those who were currently using contraceptives, 88 (44%) were using condoms while 27 (13.5%) were relying on safe period method. Twenty (10%) were experiencing coitus interruptus and only 19 (9.5%) were using intra uterine devices (IUDs). Majority (70%) of non-users of contraception narrated that the desire to have more children was the main reason for not using any form of contraception. Only 5% of the non-users were of the view that this is against our religion. Most of the users (70%) were of the view that our religion allowed family planning.

**Table-1: Educational status of the respondents**

Educational level	N	%age
Illiterate	116	58%
Primary Class	38	19%
Middle Class	20	10%
Secondary Higher Class	26	13%

**Table-2: Methods of contraception**

Contraceptive used	Frequency (%)
Condom	88 (44%)
Safer period	27 (13.5%)
Coitus interrupts	20 (10%)
IUD	19 (9.5%)
Non users	46 (27%)

## DISCUSSION

Emergency contraception provides a safe and effective means of post coital treatment and has been estimated to prevent at least 75% of expected pregnancies resulting from unprotected intercourse.<sup>3</sup>

Unintended pregnancy is a global problem, which affects women, their families and society at large. Abortion is a frequent consequence. There are about 50 million pregnancies terminated each year.<sup>4</sup> In the USA, almost 50% of pregnancies are unwanted.<sup>2</sup> It has been calculated that the widespread use of emergency contraception in the USA could prevent over a million abortions and 2 million unintended pregnancies that end in childbirth each year.<sup>14</sup>

The actual contraceptive prevalence rate (CPR) in Pakistan is not known. Different agencies have contradictory estimates about it. Over the years, the national figure of contraceptive prevalence rate has increased but if compared to other countries of the region, there is no room for complacency.

Contraceptive prevalence rate (CPR) increases markedly by level of education, these trends were observed in a study conducted in Bangladesh.<sup>15</sup>

In our study, there were 58% illiterate ladies, 19% had primary education, 8% had middle education and 13% had secondary or higher education. According to Pakistan Integrated Household Survey (PIHS), in 1996–97, only one third of girls' ages 10–19 years had even attended school. Because of this illiteracy, there are great misconceptions on reproductive health issues, lack of awareness and a wide gap between attributes and actual behaviour.<sup>16</sup>

In Pakistan most of people use safe period method and coitus interruptus because of religious constraints as shown by our study, i.e., 50% and 20% respectively.<sup>16</sup>

In a study conducted in Bangladesh, it was stated that CPR was depressingly low in a community where more than two thirds of religious leaders were against family planning.<sup>17</sup>

A study conducted in Muslim countries shows that 28% of the respondents are still ignorant of the fact that their religion does not stop family planning. This study has identified baseline information in terms of fertility and contraception. 35% had ever used contraceptive method. In another study carried out in Karachi and Hyderabad on general physicians, the CPR was 26.7%, while this figure was 28% for married medical students of different medical colleges in another UNICEF study completed in 1992.<sup>18</sup>

The use of condoms was the preferred contraceptive method; this was followed by coitus interruptus & safe period method. It is strange to find out that more than 62% are depending on the two conventional methods of safe period and coitus interruptus.<sup>19</sup>

Studies of women attending general practice and family planning clinics showed that the source of information also had same influence on the accuracy of knowledge of EC. All to the two international studies, women attending general practice showed the only 13.6% and 11.3% of respondents know the correct time limit during which potential contraception could be used effectively. But in our study only 3% knew about its correct time limit and only 7.5% women had even used it.<sup>20,21</sup>

Media can play a very important role in disseminating information about EC in collaboration with health care providers and this idea is supported by a study done by Harper and Ell.<sup>19</sup>

Educational messages must distinguish clearly between EC and abortifacient use as almost half of respondents considered EC as an abortifacient. Reasons for lack of use included poor knowledge of mechanism of action. A recent literature review on the mechanism of action of hormonal preparation used for EC concluded that further research was

needed to determine fully the mode of action and provide a clear cut answer. Our results showed that 60% population considered it as abortifacient and 40% considered it as method of contraception which is well supported by the international studies.

Sorhains *et al*<sup>20</sup> conducted a survey among university students in Kinston, Jamaica which showed that only 28% knew that a woman must take the first dose within 72 hr of unprotected. Many (86%) participants said that they would recommend this method to a family member or friends while according to Smit *et al*<sup>21</sup> 92.3% would recommend it to a friend. After giving correct information to the respondents of our study 90% favoured for its increase advertisement, 80% said that they would recommend it to their friends, family 80–85 % were in favour of its availability without the prescription.

Concerns or worries about abuse, side effects, spread of STI/HIV and promiscuity are issues that need to be corrected by proper education as the mode of action and safety of method. Our study results regarding concerns are well supported by Scottish project<sup>21</sup>, as only 13.5% of pupils thought that EC was safer than regular use of the oral contraceptive pills.

## CONCLUSION

All of the studies among potential user of emergency contraception have shown that knowledge and use increases with the time. There is dire need to improve female's literacy and awareness about contraceptive methods and their accessibility among users in Pakistan.

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