

# Awareness and Knowledge about Contraceptive Practices and Emergency Contraception in Paramedical Staff Working in a Tertiary Care Hospital of Karachi, Pakistan

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## ABSTRACT

**Objectives:** The study was revolving on means to explore comprehensions regarding different contraceptive methods including emergency contraception among primary health care providers (HCP) {Registered Staff Nurse (RN), Lady Health Visitor (LHV) and Midwives (MW)} in tertiary care hospital of Karachi.

**Study Design:** Cross-sectional study

**Place and Duration of Study:** This study was conducted at the Department of from Physiology / Community Health Sciences, Shaheed Mohtarma Benazir Bhutto Medical College, Lyari, Karachi from Dec. 2015 to June 2016

**Materials and Methods:** Female employees in the reproductive age group either with marital or non marital status were interviewed. A survey performa containing both open and close type questions was utilized.

**Results:** 258 females assented for the participation. All the female participants were educated and bulk (97.2%) had a metropolitan background. Out of 190 married females, 154 (81.1%) used various birth control methods; among them (73.3%) were on and off users. fifty participants undergone termination of pregnancy, out of which 46 had natural and 34 had persuaded intentional termination of pregnancy. Amidst the accessible contraceptive techniques, condom was the popular method in 89 (57.8%) after which Copper T in 38 women (24.7%). Regarding hormonal contraceptives the use was very low, which is only 2.6%. Newspapers and television were the widespread source of public awareness in 149 subjects (57.7%). Only 29 females (11.2%) were sentient and three females utilized emergency contraception once in their life.

**Conclusion:** A large number of educated working HCP has awareness and knowledge about use of contraception; conversely, the knowledge about use of emergency contraception was very low.

**Key Words:** Contraception; health care providers; emergency contraception

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## INTRODUCTION

Soaring fertility and brisk population escalation have an impact on the overall socio-economic development of the country in general along with maternal and child health in particular.

Maternal and child mortality are two of the chief health care indicators, challenging healthcare organizations, especially in developing countries. The majority of maternal deaths are the direct result of complications come across during pregnancy or arising from their unsafe terminations.<sup>1</sup> The World Health Organization (WHO) reported that unwanted, mistimed and unintended pregnancies are the most common cause of maternal mortality in developing countries.<sup>2</sup> The Pakistani demographic and health survey (DHS 2000) identified that one in four deaths among Pakistani females in the period 1994–2000 was due to a pregnancy or pregnancy related cause. One of the reasons for this is the lack of skilled healthcare personnel attending births.<sup>3</sup> In 2005 Syed et al reported that only 36% of births in Pakistan were attended by an appropriately skilled person; however, he also reported that up to 100, 000 maternal deaths could be avoided each year if women who did not want a child used effective contraception<sup>4</sup>.

According to Tabassum et al in 2010, that the females frequently display considerable change in attitude over

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time, but they do not always reveal corresponding changes in contraception habits.<sup>6</sup>

Mehnaz et al reported that in 80% educated families after the birth of their first child they start utilizing different family planning methods, while in more than 50% of the uneducated families avoid contraception after the delivery of their third and fourth baby. Therefore it can be said that education plays an imperative role in spacing.<sup>7</sup>

The Family planning department, Ministry of Health, Government of Pakistan has launched E-pills and E72 in the Family Planning Program, which are meant to be used within 72 hours after unprotected coitus. These measures are taken in order to achieve birth control situation of the country.<sup>8</sup>

It is the demand of recent times that such studies should be conducted that will help us understand the factors contributing in family planning, their acceptance and applications by married couples.

This study was undertaken with the single line objective to assess the level of awareness, attitude and current practice of different type of family planning methods by the educated working women of reproductive age group, to find out association, if any, between their family planning Practices and different socio demographic variables and also to elicit reasons precluding couple to practice family planning method.

## MATERIALS AND METHODS

This study was conducted during December 2015 till June 2016. This was a cross-sectional study conducted with females from the following categories:

1. Staff nurses.
2. Lady Health Visitor
3. Midwives

The above mentioned categories of female HCP's, working in Shaheed Mohtarma Benazir Bhutto Medical College and Sindh Government Lyari General Hospital in Karachi. All of the subjects have done 03 to 06 months training course in Family Planning Methods after finishing secondary education. Female employees between the age of 18 to 35 who are either married or unmarried were included in the study. Out of the 284 employees 258 women agreed to participate in the study while 26 (9.2%) refused.

A pilot tested performa which covered socioeconomic and reproductive status of the participants was used.

The investigators informed the staff personally. The participants actively participated in the study via filling the questionnaire in their respective duty areas between 9 a.m. till 3 p.m. and the filled performa was delivered by hand to the investigators after filling. Informed consent was taken. Study was approved by the institutional review board and ethics committee of Shaheed Mohtarma Benazir Bhutto Medical College, Karachi. On the basis of information collected, data was

analyzed. Statistical analysis was done using SPSS 20 software (SPSS Inc., Chicago, IL, USA).

## RESULTS

The demographic status of participants is in Table 1.  $24.2 \pm 6.9$  was the average epoch of the participants and  $18.6 \pm 4.9$  was the average age of marriage in the participants.

All female participants were educated, 75 (31.3%) were alumnae's and 31 (9.3%) were higher alumnae qualifications 251 (97.2%) participants were from metropolitan locale, 169 (65.5%) were of combined kin system and 89 (34.4%) from independent kin system. All the participants have two or less than two progeny. 34 married participants went through provoked abortions.

**Table No.1: Demographic characteristics of the study population (n = 258)**

<b>Age :</b>	
a. 20-25years	160 (62)
b. 26-30 years	51 (19.7)
c. 31-35 years	36 (13.9)
d. >35 years	11 (4.2)
<b>Educational Status:</b>	
a. High School	22 (9.3)
b. High School with Vocational Training	140 (54.2)
c. Graduates	81 (31.3)
d. Postgraduates	15 (5)
<b>Marital Status:</b>	
a. Married	190 (73.6)
b. Unmarried	68 (26.3)
<b>Professional Status:</b>	
a. RN	61 (23.6)
b. LHV	151 (58.5)
c. MW	46 (17.8)
<b>Type of family:</b>	
a. Nuclear family	89 (34.4)
b. Joint family	169 (65.5)
<b>Children:</b>	
a. None	47 (24.7)
b. One	54 (28.4)
c. Two	89 (46.8)
<b>Number of abortions n = 80:</b>	
a. Spontaneous	34 (42.5)
b. Induced	46 (57.5)

All parentheses are in percentages

Participants had information regarding contraception. In the current study there were 190 married participants, 113 (73.3%) participants are proficient contraceptive users. 41 (26.6%) used contraception customary while 154 (81.1%) were lopsided regarding contraception. 68 bachelor subjects were sentient regarding contraception without sexual activation. Spacing methods specifically withdrawal and condoms were the most popular methods among the participants. Sterilization was most

acceptable procedure only in three (1.9%) participants. 57.8% used condom while 38 (24.6%) followed by withdrawal methods. (Table 2)

57.7% participants informed that they used television and newspapers as the main source of public awareness regarding contraception. 82.4% clued up that they were sentient of recompenses and drawbacks regarding contraceptive techniques. 54.5% participants informed that both partners took the decision regarding the method of contraception.

**Table No.2: Contraceptive practices**

<b>Contraceptive Use:</b>	
a. User(n=190 married females)	a. 154 (81.1)
b. Nonuser	b. 36 (18.9)
<b>Method of contraception used: (n = 154)</b>	
a. Condom	a. 89 (57.8)
b. Copper T	b. 18 (8.4)
c. Withdrawal method	c. 33 (24.6)
d. Rhythm method	d. 7 (4.5)
i. Oral pills	i.4 (2.6)
ii. Tubal ligation	ii.3 (1.9)
<b>Medical advice before using contraceptive method: (n = 154)</b>	
a. Advice taken	a. 46 (29.8)
b. Advice not taken	b. 108 (70.1)
<b>Source of knowledge: (n = 154)</b>	
a. Media	a. 70 (27.1)
b. Medical Literature	b. 24 (9.3)
c. Friends	c. 149 (57.7)
d. Partner	d. 8 (3.1)
e. Family	e. 7 (2.7)
<b>Satisfied/dissatisfied with method used: (n = 154)</b>	
a. Satisfied	a. 127 (82.4)
b. Dissatisfied	b. 27 (17.5)
<b>Aware of advantages and disadvantages of method used: (n = 154)</b>	
a. Yes	a. 114 (74%)
b. No	b. 40(25.9%)
<b>Deciding member for use of particular method:(n = 154)</b>	
a. Both husband and wife	a. 84 (54.5)
b. Husband	b. 5 (3.2)
c. Self	c. 23 (14.9)
d. Doctor	d. 1 (0.6)
e. Friend	e. 41 (26.6)

All parentheses are in percentages.

29 (11.2%) participants of the study were sentient regarding contraception used within 72 hours of unprotected coitus, 19 out of 29 registered staff nurses. Three participating females have practiced urgent situation contraception. As the information was given regarding emergency contraception 61% showed interest (Table 3). Registered staff nurses has

satisfactory information regarding 72 hour contraception as compared to other participants as analyzed on chi squared analysis (P=0.29).

**Table No.3: Awareness of emergency contraception**

<b>Knowledge about emergency contraception: (n=258)</b>	
a) Yes	a) 29 (11.2)
b) No	b) 229 (88.7)
<b>Method of emergency contraception used: (n=258)</b>	
a) Oral pills	a) 3/29 (10.3)
<b>If aware, in future would like to use emergency contraception: (n=258)</b>	
a) Yes	a) 44 (17)
b) No	b) 5 (1.9)
c) No reply	c) 209 (81)

All parentheses are in percentages

## DISCUSSION

Spacing techniques and understanding regarding 72 hour Epill was analyzed in learned females, proficiently skilled like RN, LHV and MW etc. The sample population in this study is a good representation of the erudite females in health care system; the study showed that 81.1% of educated married women practiced contraception, which is quite high in comparison to the contraceptive prevalence rate of 48.2% indicated in the report of health department, government of Sindh. <sup>[9]</sup> 98% participants used spacing and withdrawal techniques, while 1.9% used sterilization. This is in agreement with the findings of Usmani et al.<sup>[2]</sup> 2.6% of women used steroid based contraception which is in total disagreement with the findings of Mathew et al which presented the findings of United States, where oral contraceptive pills was popular annuli able spacing procedure.<sup>[10]</sup> In ICMR study on estimating contraceptive choices showed that only 6% of females preferred for OCP over other contraceptives.<sup>[11]</sup> Farah et al reported that after initial two deliveries females preferred OCP, these findings are opposite to our findings.<sup>2</sup>

Ansari et al reported that main stream information regarding choice of spacing technique was extracted from friends and television; this is consistent with our findings. As per health department study 68% families took decision regarding method of contraception, this is in accordance with our findings.<sup>11</sup>

In Pakistan knowledge regarding ECP and HCP is almost missing.<sup>12</sup> In association, a study of United States revealed that 36% participants stated that ECP is a better means to avoid unwanted pregnancies. <sup>[13]</sup> A study done by Aneblom et al<sup>14</sup> and a survey done by Stuart et al<sup>15</sup> showed that ECP was the most favorite technique of protection after unprotected sex. In the current study the understanding regarding ECP was

11.2%, which is more than the findings of Ansari et al, <sup>[12]</sup> this may be due to the reason that the participants of the study integrated only HCP.

One of the most important information from this study was that 31% of participants were concerned to use ECP, if accessible on squat price.

## CONCLUSION

To summarize, it can be stated that a high number of females in our study population used contraception. Spacing and withdrawal methods of contraception were more commonly practiced; Electronic and printed information in local language and with pictures were the most significant means of knowledge regarding contraception. Knowledge of ECP was stumpy and here is a vital requirement to endorse it.

**Conflict of Interest:** The study has no conflict of interest to declare by any author.

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