

Original Article

Perception about Emergency Contraception in Married Females of Childbearing (15-49) years in Dadu, Sindh

Farhana Shaikh¹, Muhammad Aslam², Sajida Dahri³, Zoha⁴, Iftikhar Ahmed⁵, Aqsa Shafique Asma⁶

¹Lecturer Department of Community Medicine Rawal Institute of Health Sciences, Islamabad

²Assistant Professor Department of Community Medicine Akhtar Saeed Medical College, Rawalpindi

³Lecturer Department of Community Medicine Hazrat Bari Sarkar Medical & Dental College, Islamabad

⁴Medical Student Rawal Institute of Health Science, Islamabad

⁵Associate Professor of General Surgery, Akhtar Saeed Medical College Rawalpindi, ⁶PhD Scholar university of York, UK

Correspondence: Dr. Farhana Shaikh Lecturer

Department of Community Medicine Rawal Institute of Health Sciences, Islamabad

Abstract

Objective: To determine the perception about emergency contraception in married females of childbearing (15-49) years and to identify associated factors related to perception in Dadu, Sindh.

Methodology: A descriptive cross-sectional study of 216 married females of childbearing (15-49) years was conducted at Dadu, Sindh during March to August 2023. Participants were selected through simple random sampling. Questions were asked regarding perception of emergency contraception through structured questionnaire by getting informed verbal consent. The analysis of the data was done by using SPSS-26.

Results: From 216 participants only 3.2% had perception regarding emergency contraception. Major source of perception received from healthcare professionals. Number of females who had ever used it, was 4 (1.9%). 3.2% participants had knowledge regarding correct timing (up to 72hours) for its effective usage. 69% participants lie in age group of 18-34 years and 69% were illiterate, 77% from rural area and 5.6% participants were employed. 57.9% study subjects had monthly house hold income ten thousand rupees. 92.1% were residing in joint family structure and 79.6% having two or more children. Study revealed that 24.5% had unplanned pregnancies and 13.9% underwent abortions. Further findings of study revealed that education, residence, guardian's income, unplanned pregnancies are major variables that determine the understanding of emergency contraception.

Conclusion: It was observed that educated females were more aware about emergency contraception and those who were living in developed areas with high socioeconomic status and having unwanted pregnancies in their past.

Key Words: Emergency contraception, perception, childbearing, unplanned pregnancies.

Cite this article as: Shaikh F, Aslam M, Dahri S, Zoha, Ahmed I, Shafique A, Asma. Perception about Emergency Contraception in Married Females of Childbearing (15-49) years in Dadu, Sindh. J Soc Obstet Gynaecol Pak. 2024; 14(3):405-409.

Introduction

Pakistan is at present the 5th most populous country in the world. With a 2.4% annual growth rate, it is projected to reach 310 million people by 2050, up from 238.6 million now.^{1,2} This will have a significant effect on Pakistan's environment and socioeconomic status, as well as its capacity to meet the Sustainable Development Goals (SDGs) particularly SDG-3 (Good wellbeing and health).³ 74 million women worldwide who live in low and middle income nations become pregnant each year against their will. It results in 47,000 maternal deaths and 25 million unsafe abortions

annually.⁴ Modern contraception has made it possible to avoid an estimated 308 million unnecessary births.⁵ An extra 67 million unnecessary pregnancies in every year might be avoided if all women had access to the current forms of contraception they need.⁵ One essential part of family planning is emergency contraception.⁶ Unlike other standard contraceptive methods, which are given prior to sexual activity. Emergency contraception prevents conception even when given within 72 hours of unprotected sexual activity. Literature shows that there is not any method

Authorship Contribution: ^{1,2}Substantial contributions to the conception or design of the work or the acquisition, Final approval of the version to be published, ³Critically Revised the Manuscript, Agrees to be Accountable for All Aspects of Work Ensuring Integrity and Accuracy, ^{5,6}Drafting the work or revising it critically for important intellectual content, ⁴Literature review

Funding Source: none

Conflict of Interest: none

Received: July 09, 2024

Accepted: Oct 11, 2024

of contraception which shows 100% results,⁷⁻¹⁰

However, the chance of an unintended pregnancy can be reduced with emergency contraception by up to 95%.⁶, this shows remarkably successful outcomes of emergency contraception.⁶ Intrauterine copper devices (IUCDs) and contraceptive pills are the two main types, IUCDs implantation is possible within five days of unprotected sexual activity. Other forms of emergency contraception are oral pills i.e., levonorgestrel, mifepristone, and ulipristal acetate.⁷⁻¹⁰ Using contraceptive techniques, especially emergency contraception, can help avoid unwanted pregnancy and dangerous abortions. Using it, is one way to prevent getting pregnant following unprotected sexual activity.⁶

The use of contraception enhances the health of women and children in a number of ways, such as by lowering the risk of maternal death and increasing the nutritional status of both mothers and children as well as child survival through birth spacing.¹¹ There are many potential barriers that prevent women from using contraceptive methods in Pakistan that may be the cost of contraceptives, the perceived religious, social, and cultural rejection of contraception, ignorance of contraception, and difficulty accessing contraceptive services.¹² Despite the specific emergency contraception medications safety, effectiveness, and accessibility, Pakistani women of childbearing age do not use it because of lack of awareness about it.¹³

In Pakistan, a public health concern is the low utilization and awareness regarding emergency contraception, even in cases where normal contraceptives may not work as intended. It will definitely assist to lessen unwanted pregnancies and its complications.¹⁴ It is necessary for every women to know when to use, dosage, availability and its effectiveness. For women who repeatedly seek to end an unwanted pregnancy in poor nations such as Pakistan, unsafe abortion poses a serious risk to their health. We can reach our aim successfully which is promoting reproductive health and autonomy by achieving these objectives which are to assess the perception about emergency contraception in married females of childbearing (15-49) years and to identify associated factors related to it.

Methodology

A quantitative research design was the foundation of current study. A cross sectional study was conducted at Dadu, Sindh, for six months duration (March to August

2023). The sample size was computed using the single proportion estimation formula, $n = z^2 P (1-P) / d^2$ and the following assumptions are made: 24.2% of emergency contraception prevalence in Pakistan, with z value of 1.64, 10% margin of error (d), and 95% confidence interval (CI). The estimated Sample size is 197. Following the addition of 10% for non-responses, 216 was determined to be the overall sample size.

Married females of childbearing (15-49) yrs, were selected by simple random sampling from different private clinics (Gynae/Obs and Paeds) of Dadu, Sindh. Those women who were not currently using any long term contraceptive method like IUCDs and Implants were included in my study. Data was collected through pre made questionnaire. It was taken & modified from previous literature 1,2,5. The final questionnaire was piloted before the actual data collection to check the reliability and validity. Study tool consists of following components i.e. Sociodemographic, Obstetric information and perception about emergency contraception. After collection of data, it was analyzed by using SPSS-26. Results were formulated in tables. Chi square test was applied on different variables for its association Informed verbal consent was taken from the study participants to explain objectives of this study and assured them that collected data will remain confidential and will only be used for purpose of research.

Results

The majority of participants (69%) were aged 18-34 years, with 69% being illiterate. Most participants (77.8%) resided in rural areas, and 94.4% were housewives. Only 5.6% of the participants were employed. Regarding household income, 57.9% had a monthly income of 10,000 PKR or less. A significant proportion (92.1%) lived in joint family structures. (Table I)

A large proportion (79.6%) of participants had more than two children, while 24.5% had experienced unintended pregnancies, and 13.9% had undergone abortions. No participants reported having no children, indicating high fertility rates among the group. (Table II)

Awareness about emergency contraception was very low, with only 3.2% of participants having any knowledge. All those aware had received information from health workers, while none cited media or family/friends as sources. Only 1.9% had ever used emergency contraception. Most participants (95.37%)

lacked knowledge about the correct usage timing, and only 3.2% believed emergency contraception could prevent pregnancy. The majority (91.66%) had no knowledge about its safety or effectiveness. (Table III)

Variable		N(%)
Participant Age	<18 years	31(14.4%)
	18-34 years	149(69%)
	35years & Above	36(16.7%)
Education	Illiterate	149(69%)
	Primary	29(13.4%)
	Middle	12(5.6%)
	SSC	13(6%)
	HSSC	9(4.2%)
	others	4(1.9%)
Residence	Urban	48(22.2%)
	Rural	168(77.8%)
Employment Status	House Wife	204(94.4%)
	Employed	12 (5.6 %)
Employment status of Husband	Un employed	145(67.1%)
	Employed	71(32.9%)
Monthly wages	10000	125(57.9%)
	10000 - 20000	79(36.6%)
	> 20000	12(5.6%)
Family organization	Single	17(7.9%)
	Joint	199(92.1%)

Variables		N (%)
Total Children	None	0(0%)
	One	14(6.5%)
	Two	30(13.9%)
	More than Two	172(79.6%)
Ever experienced an unintended pregnancy	Yes	53(24.5%)
	No	163(75.5%)
Previous history of abortion	Yes	30(13.9%)
	No	186(86.1%)

Variables		N(%)
Perception about Emergency Contraception	Yes	7(3.2%)
	No	209 96.8%)
Source of information	Media	0 (0%)
	Health workers	7 (3.2%)
	Family Members & Friends	0 (0%)
	None	209 (96.8%)
History of emergency contraception usage.	Yes	4 (1.9%)
	No	212 (98.1%)
What is accurate time of emergency contraception usage after coitus	Immediately after intercourse	2 (0.9%)
	Within one day	3 (1.4%)
	Within 72 hours	5 (2.3%)
	No knowledge	206 (95.37%)
Benefits of emergency Contraception	Prevent Pregnancy	7 (3.2%)
	Prevent HIV/AIDS / sexually transmitted	0 (0%)

	disease	209(96.8%)
	Don't know	
When will you prefer to use it.	Condom breaks	6 (2.7%)
	Forgot to take contraceptive pills	10(4.6%)
	Un protected intercourse	8(3.7%)
	No Knowledge	192 (88.8%)
Is emergency contraception effective	Yes	3 (1.4%)
	No	0 (0%)
Is it safe	Yes	7 (3.2%)
	No	11 (5.09%)
	No knowledge	198(91.66%)
Is there negative effects	Yes	11 (5.09%)
	No	9 (4.16%)
	No knowledge	196(90.7%)

Education and place of residence showed significant associations with awareness of emergency contraception (p=0.000). Women with higher education and those residing in urban areas were more likely to be aware. Experience of unintended pregnancy was also significantly associated with awareness (p=0.00). Other factors, such as age, employment status, family structure, and number of children, did not show significant associations. (Table IV)

Variable		Frequency		
		Yes	No	P-Value
Participant's Age	< 18 years	0	31	0.838 (Not Significant)
	18-34 years	6	143	
	35 years and above	1	35	
Education	Illiterate	0	149	0.000 (Significant)
	Primary	1	28	
	Middle	0	12	
	SSC	0	13	
	HSSC others	4	5	
Residence	Urban	7	41	0.000 (Significant)
	Rural	0	168	
Status of Employment	House wife	5	199	0.051 (Not Significant)
	Employed	2	10	
Family Organization	Single	1	16	0.441 (Not Significant)
	Joint	6	193	
Total Children	None	0	0	0.75 (Not Significant)
	One	0	14	
	Two	0	30	
	>Two	7	165	
Ever experienced an unintended pregnancy	Yes	7	46	0.00 (Significant)
	No	0	163	
Previous history of abortion	Yes	2	28	0.251 (Not Significant)
	No	5	181	

Discussion

Analysis of current study finding indicates, perception about emergency contraception in married females of childbearing (15-49) years at Dadu, Sindh is 3.2%. These results are near similar to other studies conducted in India by Pragati Meena et al which shows 4.2 % participants were aware about it.¹⁵ Another study done at Bangladesh by Ahmed, Md. S et al which shows 13.6%, ever married women in Bangladesh were aware.¹⁶ Similarly study was conducted at Lahore, Pakistan by Manzoor et al in which 16.9% participants had knowledge about emergency contraception.¹⁷ Women who were aware of emergency contraception 1.9% (n=4) had ever used. Number of positive respondents who were knowing about correct timing (72 hours) of taking emergency contraception is 2.3% after unsafe sex. These findings are dissimilar to the results obtained 42% and 18.5% in India and Pakistan respectively.^{15,17} Analysis of another variable shows that principal source of information was medical professionals rather than media, friends or family member, comparable to the study of zeba manzuur et al in which the primary source of information was friends superseded by spouse. Minimum number of participants received information from health professionals.¹⁸ Another study conducted by Rehman A et al in India, where the most common source of information were electronic media.¹⁹ Respondent's education is directly proportional to perception about emergency contraception was observed in current study. Illiterate females or having primary schooling less likely had perception about it than those with higher schooling females. Similar conclusion was observed in Sub Saharan Africa, India & in Karachi, Pakistan.^{20,21,22} Another key finding is participant's residence which is directly proportional to perception i.e, females residing in developed areas had more knowledge than those who were living in underdeveloped areas. Same findings were observed in study conducted by researcher at Egypt.²³ It was also notified by Meharali S et al that its usage is significantly influenced by place of residence.²⁴

Further analysis of study shows that inequalities in socioeconomic status frequently have a major impact on the availability of modern contraceptive methods in most rural areas of country like Dadu, Sindh. Financial constraints often prevent low-income households from accessing modern contraception and other healthcare procedures, same was found in study of Ghana, which also pointed out access and pricing of emergency

contraception has direct impact on perception of community because financially secure women can buy it easily than poor.²⁵ Data obtained from study of Egypt which shows perception is directly proportional to wealth.²³ Participants of study conducted at Islamabad, Pakistan suggested that it should be at affordable prize because it was observed that awareness regarding it was low in lower socioeconomic group.¹⁸ In Punjab, differences in the distribution of income lead to unequal access to contraceptives methods, with impoverished communities having less access than prosperous regions.²⁶ Furthermore, it was noted that women who do not wish to have any more children and those who had a history of unintended pregnancies had greater knowledge about it, same results were observed in study conducted in Egypt.²³ An other study conducted at India which also shows same results.²⁷

Current study shows that married woman of child bearing (15-49) years may use emergency contraception to prevent unintended pregnancies and its consequences that may come. It can be used in some situations following intercourse in spite of using a family planning method such as forgotten to take pill 4.6% and unprotected sex 3.7%, similar factor were observed in study conducted at Egypt.²³ Current study shows that participants who were residing in joint family structure were more aware than nuclear families, similar results were also seen in study conducted at India.²⁷ Our study shows that only 3.2% participants believed that emergency contraception is safe and effective whereas 91.66% participant had no knowledge about its safety & effectiveness. This is different from the study conducted in Rawalpindi, Pakistan, which shows 52% participants believed, it has harmful outcome, these may appear in the form of abnormality in fetus or delay in next pregnancies. The outcomes of our study failed to demonstrate any correlation between employed women's perceptions of emergency contraception, this is controversial to the study conducted at Egypt.²³

Conclusion

Perception and usage of emergency contraception is not satisfactory. Lady health workers who are part of the national primary health care program and family planning service providers can play a major role in counseling about it right at their doorstep. Other factors found to be associated with its usage were availability and affordability. Health authorities should continue to

make it available for every needy female at minimum prices at family planning centers and drug stores.

Limitation: Because of cross section design of this study, investigation of cause and effect was not possible. The majority of the self-report data came from a single city Dadu, therefore it does not reflect actual value of province or country and responses were taken only by premade structured questionnaire therefore deeper aspects of emergency contraception were not covered.

Strength: These results can influence healthcare policies, targeted at enhancing reproductive health outcomes and future population wide initiatives to raise perception.

Recommendation: Women of childbearing (15-49) years do not know enough about emergency contraception. The majority of them were willing to learn more and apply these techniques when needed, even though they were not given any information or counseling about it. It is highly advised that information concerning it be made publicly accessible and understood through the media, counseling in medical settings and the private healthcare sector. Family planning center and drug stores should stock emergency contraception at competitive cost

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