



Original Article

Knowledge of Family Planning among Nursing Students at a Private Institute Karachi

Jehangir Khan¹, Mahboob Ali¹, Afsha Bibi^{2*}, Sakina Maqсад¹, Saima Tehseen¹, Sadiq Hussain Shah¹, Rukhsana¹, Samson Javeed¹, Sabir Naveed¹ and Salima Zeeshan¹

¹Horizon School of Nursing and Health Sciences, Karachi, Pakistan

²Arham Institute of Medical Sciences and Nursing, Matta, Swat, Pakistan

ARTICLE INFO

Keywords:

Family Planning, Contraceptives, Nursing Students, Reproductive Health

How to Cite:

Khan, J., Ali, M., Bibi, A., Maqсад, S., Tehseen, S., Shah, S. H., Javed, R. S., Naveed, S., & Zeeshan, S. (2024). Knowledge of Family Planning among Nursing Students at a Private Institute Karachi : Family Planning among Nursing Students . Pakistan Journal of Health Sciences, 5(03). <https://doi.org/10.54393/pjhs.v5i03.1321>

***Corresponding Author:**

Afshan Bibi
 Arham Institute of Medical Sciences, Matta, Swat, Pakistan
fawad52005@gmail.com

Received Date: 20th February, 2024

Acceptance Date: 11th March, 2024

Published Date: 31st March, 2024

ABSTRACT

Family planning (FP) is defined as the whole effort made by a couple to prevent pregnancy and to create some space among their children. FP helps in avoiding undesirable pregnancies thus promote maternal and child health. **Objective:** To evaluate the knowledge of FP among nursing students. **Methods:** A descriptive cross-sectional study was used at Horizon School of Nursing with a total of 80 students selected through purposive sampling technique. SPSS version 26 was used for data analysis. **Results:** Study results showed that 45% of the students were in age group 20-30 years, 61.2% were female and if we talk about spouse education status all of them were literate, most of the respondent's monthly income was between 30,000-50,000 PKR, 47.5% were having no children, 40% having 1-2 children, 50% of them wished to have 1-2 children, most of them (48.8%) had 1-2 years interval between their children, majority of the respondents (88.8%) had heard of FP, the source of information regarding FP mostly (56.2%) were hospitals, availability of FP services known by respondents were private hospitals (83.8%) and methods of FP known by the students mostly (42.5%) were condoms. **Conclusions:** The study showed that only 42.5% of the students knew the condom method of FP, 23.7% withdrawal methods, 20% oral contraceptive pills, and a very low percentage of other methods of FP which need to be enhanced by conducting seminars and other awareness programs in nursing schools and colleges.

INTRODUCTION

Family planning (FP) is an important component of primary health care and also of reproductive health; it helps in reducing maternal and child morbidity, moreover, FP is a cost-effective method that can ensure the health of women, children, and communities, especially in those countries that are more populous. The age group of 18-25 years is thought to be at higher risk for experiencing adverse consequences such as sexually transmitted diseases, unwanted pregnancies, and abortions [1]. As claimed by previous research, the highest prevalence of sexually transmitted infections and the highest rate of voluntary termination of pregnancy were put in place under the 25-year-old age group [2]. Family planning (FP) is

defined as the whole effort made by a couple to prevent pregnancy and to create some space among their children. FP deals with reproductive health and adequate birth spacing. It also helps in avoiding undesirable pregnancy, promoting maternal and child health during prenatal and postnatal health care [3]. Pakistan is the 6th largest populous country in the world [4]. Its population has increased to 241 million with an annual growth rate of 2.55%. If the population of Pakistan continues to increase, by the year 2050, it is expected to reach 335 million, so it's very important to control population growth by increasing the knowledge of FP methods in Karachi population [5]. There are many methods of FP methods being used in

Pakistan, like oral contraceptive pills, implants, injections, external condoms, male and female sterilization, vasectomy, tubal ligation, withdrawal method, and fertility awareness-based methods [6]. The most effective of which are non-hormonal intrauterine devices, hormonal implants, pills, and injections. Contraceptive pills prevent the release of eggs from the ovaries; they prevent 0.3% of pregnancies if correctly used. Implants thicken cervical mucus to prevent sperm and egg from meeting; they are 0.1% effective. Intrauterine devices contain copper, which is 0.6% and male condoms are 2% effective [7]. A cross-sectional study was conducted in Somalia hospital, in the year 2018, to assess the knowledge of nursing students regarding family planning, study results showed poor knowledge and practice of contraceptives among nursing students [8]. Similarly, at the Dow Institute of Nursing, in the year 2017, study results showed that almost 100% of the respondents were aware of the contraceptive methods [9]. Moreover, in Jamshoro, in 2019, study results showed that nurses were found good at knowledge of family planning services [10].

Nursing students can play a significant role in educating the community and patients regarding the use of family planning methods and they can promote reproductive health. Therefore, this study aimed to evaluate the knowledge of FP among nursing students at a private institute in Karachi.

METHODS

A descriptive cross-sectional study was conducted at Horizon School of Nursing and Health Sciences, from August to November 2023. A total of 80 students of post-RN BSN were recruited through purposive sampling techniques. Sample size was calculated with the help of openepi.com with 95% confidence interval. All students who were married were included in the study and those who were on leave and unwilling to participate were excluded from the study. Written permission was taken from the principal of the school with reference no. HSNHS/2023/412 and consent was taken from nursing students after they were informed about the objectives of the study. The questionnaire was received through email from first researcher which was used in a study in Somalia [16]. The questionnaire consisted of 2 sections, section 1 has eight questions of sociodemographic characteristics and section 2 has 5 questions of knowledge regarding family planning. Data were collected after distribution of hard copies of questionnaire and consent forms among the students. SPSS software version 26 was used for data analysis and results.

RESULTS

Table 1 shows that 45% of the students were in the age group between 20-30 years, 43.8% were between 30-40 years and 11.2% were above 40 years of age. Study results also show that 38.8% were male and 61.2% were female. If we talk about spouse education status all of them were literate, most of the respondent's monthly income was between 30,000-50,000 PKR, 47.5% had no children, 40% had 1-2 children, 11.2% had 3-4 and 1.3% of the respondents were having more than 4 children, 50% of them wished to have 1-2 children, 40% were desirous of 3-5 while 10% of them wished to have more than 6 children if we talk about birth interval, most of them (48.8%) had 1-2 years interval between their children, 35% had more than 3 years while 16.2% had only one year space between their children.

Table 1: Sociodemographic Characteristics of The Students

Sr. No	Variable	Category	N (%)
1	Age	20-30 years	36 (45)
		30-40 years	35 (43.8)
		>40 years	09 (11.2)
2	Gender	Male	31 (38.8)
		Female	49 (61.2)
3	Marital Status	Married	58 (72.5)
		Single	22 (27.5)
4	Spouse Education Status	Literate	80 (100)
		Illiterate	00 (000)
5	Monthly Income in PKR	<30,000	27 (33.8)
		30,000-50,000	29 (36.2)
		>50,000	24 (30)
6	Number of Children	Nil	38 (47.5)
		1-2	32 (40)
		3-4	09 (11.2)
		>4	01 (1.3)
7	Desired Number of Children	1-2	40 (50)
		3-5	32 (40)
		>6	08 (10)
8	Birth Interval	1 year	13 (16.2)
		1-2 years	39 (48.8)
		>3 years	28 (35)

Table 2 shows knowledge of FP, 88.8% of the respondents knew about family planning but 11.2% of them didn't hear anything about FP, 56.3% of them got information from hospitals, 15% from friends, 18.8% from health workers and 10% got information from social media, 83.8% of the students knew about the place of availability of FP methods while 16.2% of them did not know where to get FP services. The most available places for FP were private hospitals (48.8%), 17.5% were PHC, 16.3% were DHQ hospitals, 13.6% were pharmacies and 3.8% were nursing homes. Method of FP known by the students were mostly condoms (42.5%) followed by withdrawal method (23.8%), oral pills (20%), injectable (inj.) hormones (6.3%), female sterilization

(3.8%), and Intrauterine device(IUD)(3.6%).

Table 2: Knowledge of Nursing Students on Family Planning

Sr. No	Variable	Category	N (%)
1	Have You Ever Heard of Family Planning?	Yes	71(88.8)
		No	09(11.2)
2	If Yes, Mention the Source of Information.	Hospital	45(56.2)
		Friends	12(15.0)
		Health Workers	15(18.8)
		Social media	08(10.0)
3	Is There Any Place of Availability for FP Methods?	Yes	67(83.8)
		No	13(16.2)
4	If Yes, Mention the Places of Availability of the FP Method	DHO Hospital	13(16.2)
		PHC	14(17.5)
		Private Hospital	39(48.7)
		Pharmacy	11(13.8)
		Nursing Homes	03(3.8)
5	Methods of Family Planning Known by Respondents	Condom	34(42.5)
		Oral Contraceptive Pills	16(20)
		Inj. Hormones	05(6.2)
		IUD	03(3.8)
		Female Sterilization	03(3.8)
		Withdrawal Method	19(23.7)

DISCUSSION

The present study aimed to assess the knowledge of FP among nursing students at a private college in Karachi. The study showed that 88% of the students had heard of FP, 42.5% of them had knowledge of the condom method of FP, 23.7% of withdrawal methods, 20% of oral contraceptive pills, and most of them got information from hospitals. These study findings are similar to a study conducted by Ali *et al.*, which showed almost the same results: 88.5% of respondents knew FP, the majority of them (93.9%) had knowledge of condoms, and 59% got information from healthcare centers [11]. Similarly, a study conducted by Leghari *et al.*, showed almost the same results: 100% of the respondents (100% men and 97% women) knew about male condoms, and the best source of information was private hospitals (83.6%) [12]. To discuss the demographic survey, the present study showed resemblance to a study done by Yadav *et al.*, which showed that 51% of the respondents were female and were in the age group 23–24, and 100% of them knew about FP, but only 29% of them got information from healthcare providers [13]. Similarly, another study conducted by Moussa *et al.*, showed that the majority of the respondents (97.5%) were in the age group 20–30 years, most of them 97.5% had 1–2 children, 97.2% had heard of FP methods from TV or radio and 43.7% have heard about the condom method of FP. These findings are similar to the present study, which showed almost the same results [14]. Contrary to this, the present study findings are different from a study conducted by Seger *et al.*, which showed that

only 2.4% of women had good knowledge of FP [15]. Similarly, a study conducted by Omar *et al.*, in Somalia showed that 40% of the participants were aged between 25–30 which is similar to the present study, but the knowledge level in the present study is higher (88%) than that of Omar *et al.*, which showed only 40% of the students had heard of FP [16]. Similarly, another study done by Asut *et al.*, showed that 53.6% of the participants had heard of FP methods, which is also lower than the present study results [17]. The present study results were also compared with a study conducted in Kashmir, Pakistan. The study showed that 78.8% of the respondents had heard about FP methods; both of the study findings were similar [18]. The major source of information in the present study is hospital (56.2%), which is similar when compared with the study of Sultan *et al.*, where the key source of information was hospitals and secondly the internet. Moreover, condoms were the most commonly known method of FP (100%) by respondents [19]. Since hospitals are the primary source of information for respondents, it is essential to strengthen and expand educational initiatives within hospital settings [20].

CONCLUSIONS

The study showed that only 42.5% of the students knew about condom method of family planning, 23.7% withdrawal methods, 20% oral contraceptive pills, and a very low percentage of other methods of family planning.

Authors Contribution

Conceptualization: JK

Methodology: JK, SHS, R

Formal analysis: JK

Writing-review and editing: JK, SZ, SM, ST, SJ, SN

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

Source of Funding

The authors received no financial support for the research, authorship and/or publication of this article.

REFERENCES

- [1] Atuahene MD, Afari EO, Adjui M, Obed S. Health knowledge, attitudes and practices of family planning service providers and clients in Akwapim North District of Ghana. *Contraception and Reproductive Medicine*. 2016 Dec; 1:1-8. doi: 10.1186/s40834-016-0016-3.
- [2] Bozkurt N, Korucuoğlu Ü, Aksakal FN, Biri A, Çiftçi B, Maral I *et al.* Turkish adolescents' knowledge on and attitude toward emergency contraception. *Journal*

- of Pediatric and Adolescent Gynecology. 2006 Dec; 19(6): 391-5.
- [3] Akhtar S, Ahmed H, Khan G. Knowledge and practice of family planning methods in women of childbearing age. *Journal of Bashir Institute of Health Sciences*. 2021 Dec; 2(2): 63-73. doi: 10.53576/bashir.002.02.0038.
- [4] Al-Musa HM, Alsaleem MA, Alfaifi WH, Alshumrani Z, Alzuheri NS, Aslouf AS et al. Knowledge, attitude, and practice among Saudi primary health care attendees about family planning in Abha, Kingdom of Saudi Arabia. *Journal of Family Medicine and Primary Care*. 2019 Feb; 8(2): 576-82. doi: 10.4103/jfmpc.jfmpc_363_18.
- [5] Shahid A. Knowledge and attitude of contraception among nursing and midwifery students. *Journal of Surgery Pakistan*. 2018 May; 23(1): 35-40. doi: 10.21699/jsp.23.1.9.
- [6] Leghari TA, Ansari MI, Soomro GP, Chandio Z, Kehar IA, Ansari MS. Knowledge and practices of family planning among staff nurses of Liaquat University Hospital Jamshoro, Sindh. *Independent Journal of Allied Health Sciences*. 2019; 2(04): 203-12.
- [7] Mostafa N, Saleh L, Al-Shawakh M. Assessment the Nurses' Knowledge about Family Planning Methods in Health Centers in Lattakia. *Tishreen University Journal-Medical Sciences Series*. 2020 Mar; 42(1).
- [8] Hasan JN. Knowledge, Attitude and Perception of Married Women Toward Family Planning in Shekhan City. *Annals of the College of Medicine, Mosul*. 2022 Jun; 44(1):70-5. doi: 10.33899/mmed.2021.131885.1119.
- [9] Khan A, Hashmi HA, Naqvi Z. Awareness and practice of contraception among child bearing age women. *Journal of Surgery Pakistan (International)*. 2011 Oct; 16(4): 179-82.
- [10] Al Ameen MI and Al Deen LD. Knowledge, attitudes and practices of family planning among a sample of women attending primary health care centers in Al-Karkh, Baghdad, 2014. *Iraqi Medical Journal*. 2016 Jul; 62(2): 115-24.
- [11] Ali S, Hassan S, El-Nemer A. Assessment of family planning knowledge and practice among married couples. *Mansoura Nursing Journal*. 2020 Jul; 7(2): 214-26. doi: 10.21608/mnj.2020.179779.
- [12] Benyian FF. Assessment of Women's Knowledge and Practices toward Family Planning at Maternity Hospitals in Baghdad City. 2021 Jan; 21(1): 253. doi: 10.37506/mlu.v21i1.2313.
- [13] Yadav K, Agarwal M, Shukla M, Singh JV, Singh VK. Unmet need for family planning services among young married women (15-24 years) living in urban slums of India. *BMC Women's Health*. 2020 Dec; 20:1-7. doi: 10.1186/s12905-020-01010-9.
- [14] Moussa M, Shehata Ibrahim S, Elemam Hafez F. The effectiveness of an Integrated Counseling Program about Women's Reproductive Rights on Knowledge and Attitudes of Nursing Students. *International Egyptian Journal of Nursing Sciences and Research*. 2022 Jul; 3(1): 166-91. doi: 10.21608/ejnsr.2022.247070.
- [15] Seger HR, Abbas IM, Hamad IT. Effectiveness of Post-Abortion Family Planning Counseling Program on Nurses-Midwives' Knowledge in Middle Euphrates Maternity Hospitals. *Indian Journal of Public Health Research & Development*. 2018 Oct; 9(10). doi: 10.5958/0976-5506.2018.01206.8.
- [16] Omar AA and Abdirisak D. Knowledge and practice of family planning methods among the married women of reproductive age group attending SOS hospital in Mogadishu Somalia. *Turkish Journal of Health Science and Life*. 2022;5(2): 62-8. doi: 10.56150/tjhs1.883663.
- [17] Asut O, Ozenli O, Gur G, Deliceo E, Cagin B, Korun O et al. The knowledge and perceptions of the first-year medical students of an International University on family planning and emergency contraception in Nicosia (TRNC). *BMC Women's Health*. 2018 Dec; 18:1-1. doi: 10.1186/s12905-018-0641-x.
- [18] Wani RT, Rashid I, Nabi SS, Dar H. Knowledge, attitude, and practice of family planning services among healthcare workers in Kashmir-A cross-sectional study. *Journal of Family Medicine and Primary Care*. 2019 Apr; 8(4): 1319-25. doi: 10.4103/jfmpc.jfmpc_96_19.
- [19] Sultan S, Ali MM, Bardai SS, Kanpuralla MA, FSA P. Knowledge, attitude, and practice of family planning methods among married men and women. *Journal of Womens Health, Issues and Care*. 2018; 7(3):2. doi: 10.4172/2325-9795.1000311.
- [20] Duze MC and Mohammed IZ. Male knowledge, attitude, and family planning practices in Northern Nigeria. *African Journal of Reproductive Health*. 2006; 10(3): 53-65. doi: 10.2307/30032471.