

# Knowledge and Attitude of Contraception Among Nursing And Midwifery Students

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## ABSTRACT

**Objective** To assess the knowledge and attitude of contraception among nursing and midwifery students of a tertiary care hospital.

**Study design** Cross sectional study.

**Place & Duration of study** Dow Institute of Nursing (ION) Dow International Medical College, from August 2017 to September 2017.

**Methodology** A questionnaire based survey was conducted at a nursing institute. Informed consent was taken from the student before administering the questionnaire. Each student was given fifteen minutes to fill out the form. Descriptive statistics were used to present the data.

**Results** A total of 216 nursing students were given questionnaire. The response rate was 92% (200/216). Participants had reasonably good knowledge about the various methods oral contraceptives (62%), injectable progestin (63%), implants (83%), intra uterine contraceptive device (37%), tubal ligation (48%) and vasectomy (78%), but still the attitude towards reliable contraceptives was not positive as natural methods. Condoms was the most agreed upon method followed by the permanent methods.

**Conclusion** There were gaps in the knowledge among nursing students about various contraceptive method.

**Key words** Knowledge, Nursing Students, Contraception.

## INTRODUCTION:

Pakistan is one of the most populous countries in the world. According to the Population Reference Bureau 2010, the estimated population of Pakistan in year 2050 is expected to be 335 million, making it the 4<sup>th</sup> largest nation in the world.<sup>1</sup> An important factor to control the growth of its population is the contraception practice amongst them. The

contraceptive prevalence rate (CPR) is defined as the percentage of married couples, using modern and traditional methods of contraception.

The contraceptive prevalence rate in our country is as low as 27%.<sup>2</sup> A study done in Karachi showed that the percentage of the contraceptive users was 53%, which is only slightly greater than the frequency of the people using contraceptives in the urban areas.<sup>3</sup> Many methods of contraception are available in our country but still many pregnancies remain unplanned and unintended. These figures show that there is still a need of awareness amongst the health care providers including the nurses, midwives, doctors and the general population about the contraception and its use.

Health care system comprises of the paramedics, nursing and medical staff. It forms the basis of the health care delivery system.<sup>4</sup> Although the knowledge of the nurses and the nursing students have been

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investigated on emergency contraception, but in general, the contraception methods has not been explored.<sup>5,6</sup>

With this in mind this study was conducted amongst nursing students, to assess their knowledge of the use of contraception and how their awareness could improve the family planning services. With better knowledge and attitude towards contraception in the unit of health care providing system, it is expected that improvement in practices may result.<sup>7-9</sup>

**METHODOLOGY:**

This cross-sectional survey was conducted in February 2017, using a pretested, self administered questionnaire, amongst the 4<sup>th</sup> year nursing students, at the Dow Institute of Nursing (ION). A convenience sampling technique was used, and 216 participants were approached after they attended the routine lectures. In initial 10 minutes the questionnaire was explained and consent taken. They were given the questionnaires to be filled in 15 minutes.

The questionnaire contained three sections; Section I comprised of basic information and demographics, Section II assessed the knowledge and sources of knowledge in the respondents about different contraceptive methods. Each method was assessed on different questions, with answer either yes or no. Section III comprised of their attitudes towards the use of different contraceptive methods. Respondents were asked to tick mark the most appropriate option on a five point Likert scale (Strongly agree/agree/no idea/disagree/strongly disagree). Data were stored and analyzed using IBM-SPSS version 23.0. Count and percentages were reported for baseline characteristics of studied samples.

**RESULTS:**

A total of 216 nursing students participated. After excluding 16 incomplete forms, 200 nursing students responses were analyzed. The response rate was 92%. The demographics characteristics of the respondents are outlined in table I, It was found that, 89% respondents were from 24 - 28 year of age with 52% males and 84% belonged to middle

**Table I: Baseline Characteristics of Respondents (n=200)**

Characteristics		Number	Percentage
Age Group	24 - 28 year	178	89.0
	29 - 31 year	22	11.0
Gender	Male	104	52.0
	Female	96	48.0
Socioeconomic status	Middle class	168	84.0
	Upper class	32	16.0

**Table II: Knowledge About Type of Method with Sources of Information**

Sources / Methods	Family		Neighbor		Curriculum		Media	
	n	%	n	%	n	%	n	%
Natural	102	51	35	17.5	190	95	95	47.5
Lactation	67	33.5	23	11.5	172	86	8	4
Condoms	84	42	25	12.5	198	99	155	77.5
Oral Contraceptives	-	-	12	6	200	100	74	37
Progesterone	-	-	-	-	200	100	-	-
Injectables Drugs	-	-	-	-	200	100	-	-
IUCD	44	22	30	15	200	100	46	23
Implant	-	-	-	-	200	100	20	10
Tubal ligation	25	12.5	11	5.5	182	91	42	21
Vasectomy	1	0.5	-	-	182	91	56	28

class socio economic status.

### DISCUSSION:

Pakistan is unable to control the rapid increase in its population, therefore strategies to improve contraceptive knowledge of healthcare providers is important. In our study, almost 100% of the respondents were aware of the contraceptive methods, which is contradictory to other studies.<sup>10,11</sup> In a study by Kaveri there was 41% awareness about the emergency contraception by the nursing students.

The mean age of the participants in this study was 26 year. The most common source of information

was the curriculum followed by the media, family and neighbors. Genders distribution was almost equal in this study, thus a balanced data is obtained. Most of the studies have bias as female respondents were more than males.<sup>12,13</sup>

Considering the knowledge about natural methods only 40% of the respondents realized that they have high failure rates. About lactation method, 61% knew that exclusive breast feeding was necessary for its contraceptive effect. The use of condoms is not an effective contraceptive choice was realized by only 33%. This is comparable to the findings of other Fehring, who assessed the certified nurses and midwives on the methods of natural family planning,

**Table III : Knowledge on Natural, Lactation, Condoms and Oral Contraceptives**

Methods	Yes		No		No Idea	
	n	%	n	%	n	%
<b>Natural Method</b>						
Natural methods include abstinence and rhythm method	151	75.5	43	21.5	6	3
Rhythm method includes avoiding intercourse during ovulatory period	159	79.5	41	20.5	0	0
Abstinence means that male partner withdraws before ejaculation during intercourse	132	66	67	33.5	1	0.5
Natural methods have high failure rates	81	40.5	107	53.5	12	6
These are considered very effective methods	113	56.5	76	38	11	5.5
<b>Lactation Method</b>						
Confers protection from pregnancy for 6 months with exclusive breast feeding	195	97.5	3	1.5	2	1
Confers protection with breast feeding as well as top feeding for 6 months	74	37	123	61.5	3	1.5
Very effective method for 6 months	144	72	46	23	10	5
<b>Condoms</b>						
They have high failure rates	69	34.5	131	65.5	0	0
They are considered very effective methods	134	67	65	32.5	1	0.5
Can be considered for those in whom there is a risk of STD's	123	61.5	51	25.5	26	13
<b>Combine Oral Contraceptive Pills (OCPs)</b>						
They contain both estrogen and progesterone	130	65	38	19	32	16
They can be used immediately after delivery	62	31	124	62	14	7
They can be used with breast feeding	114	57	75	37.5	11	5.5
There is no problem with efficacy if 1 or 2 tablets are missed from pack, and the rest of the pack is completed timely	156	78	39	19.5	5	2.5
Patients have to take extra contraceptive measures if she missed more than 3 or 3 tablets in succession	116	58	75	37.5	9	4.5
These can cause weight gain	196	98	3	1.5	1	0.5
They are considered very effective method	157	78.5	41	20.5	2	1

Table IV : Knowledge on Injectable, Implants, Intrauterine Contraceptive Methods						
Methods	Yes		No		No Idea	
	n	%	n	%	n	%
<b>Injectables</b>						
They are available in various formulations like monthly, 2 monthly and 3 monthly injections.	195	97.5	4	2	1	0.5
NET-EN (norethisterone enanthate) 2 monthly and DMPA (Depot-medroxyprogesterone acetate) 3 monthly injections contain only progestin	83	41.5	71	35.5	46	23
Monthly injectables contain estrogen and progestin both	112	56	56	28	32	16
NET-EN 2 monthly and DMPA 3 monthly can be used with breast feeding	172	86	12	6	16	8
Monthly injections can be used with breast feeding	170	85	21	10.5	9	4.5
Injectables are considered very effective method of contraception	181	90.5	11	5.5	8	4
Return of fertility is often delayed	127	63.5	70	35	3	1.5
Gradual weight gain is common	183	91.5	13	6.5	4	2
Menstrual problems are common but not harmful	143	71.5	51	25.5	6	3
<b>Implants</b>						
It is considered very effective method	179	89.5	18	9	3	1.5
Can be used with breast feeding	166	83	12	6	22	11
They contain progestin only	110	55	55	27.5	35	17.5
Require specifically trained provider to insert and remove	165	82.5	33	16.5	2	1
Reversibility is immediate after removal	136	68	39	19.5	25	12.5
It can provide long term contraception and can be left for 3-7 years	194	97	0	0	6	3
Menstrual problems are common but not harmful	191	95.5	4	2	5	2.5
<b>Intrauterine Contraceptive Device</b>						
It can be used immediately after delivery	74	37	100	50	26	13
It can be used with breast feeding	169	84.5	7	3.5	24	12
It can be inserted in first 12 days from her LMP	168	84	12	6	20	10
It can be inserted at the time of cesarean section	104	52	86	43	10	5
It can also be used for emergency contraception	17	8.5	178	89	5	2.5
Quick return of fertility occurs after its removal	136	68	59	29.5	5	2.5
It is considered very effective method	197	98.5	1	0.5	2	1
It can be use as a long term contraception 5-10 years	117	58.5	82	41	1	0.5
It can give menstrual disturbances for first few months	133	66.5	62	31	5	2.5
It rarely leads to PID (pelvic inflammatory disease)	133	66.5	64	32	3	1.5
The risk of infection related to its insertion is within 3-5 days only	153	76.5	37	18.5	10	5

lactational amenorrhea method and condoms.<sup>14</sup> In permanent methods, only 48% of the respondents realized that reversal is not possible after tubal ligation, and 78% realized that vasectomy is

irreversible. This is comparable findings with another study done in Bangladesh.<sup>15</sup>

**Table V : Knowledge on Tubal Ligation and Vasectomy**

Methods	Yes		No		No Idea	
	n	%	n	%	n	%
<b>Tubal Ligation</b>						
It is a permanent method of contraception in females	199	99.5	0	0	1	0.5
Reversal is not usually possible	96	48	98	49	6	3
It requires a surgical procedure	199	99.5	0	0	1	0.5
Informed consent is also required	195	97.5	4	2	1	0.5
Patient should be at least more than 35 years of age	176	88	23	11.5	1	0.5
Patient has completed her family	199	99.5	0	0	1	0.5
Patients husband is informed	199	99.5	0	0	1	0.5
It is considered very effective method	199	99.5	0	0	1	0.5
It is effective soon after surgery	196	98	3	1.5	1	0.5
It causes menstrual disturbances	89	44.5	107	53.5	4	2
<b>Vasectomy</b>						
It is a permanent method for males	199	99.5	0	0	1	0.5
Reversal is not possible	156	78	38	19	6	3
It involves a safe simple surgical procedure	197	98.5	0	0	3	1.5
Does not affect the male sexual performance	191	95.5	8	4	1	0.5
It is not immediately effective and requires a time of 3 months	128	64	64	32	8	4
After vasectomy extra method of contraception is required for 3-4 months	112	56	80	40	8	4

**Table VI : Attitude Towards Use Of Different Contraception**

Methods	Strongly Agree		Agree		No Idea		Disagree		Strongly Disagree	
	n	%	n	%	n	%	n	%	n	%
Natural	62	31	110	55	0	0	28	14	0	0
Lactation	88	44	30	15	63	31.5	11	5.5	8	4
Condoms	98	49	95	47.5	0	0	7	3.5	0	0
COCP'S	27	13.5	91	45.5	62	31	1	0.5	19	9.5
Injectable	58	29	74	37	12	6	37	18.5	19	9.5
Implants	45	22.5	92	46	37	18.5	7	3.5	19	9.5
IUCD	45	22.5	103	51.5	13	6.5	7	3.5	32	16
Tubal Ligation	124	62	31	15.5	1	0.5	33	16.5	11	5.5
Vasectomy	130	65	12	6	14	7	33	16.5	11	5.5

**CONCLUSIONS:**

The study showed that the participants had reasonably good knowledge about the various methods, but still the attitude towards reliable contraceptives is not positive.

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Received for publication: 16-12-2017

Accepted after revision: 15-03-2018

Author's Contributions:

Afshan Shahid: Manuscript writing, data collection and data analysis.

Syeda Rabia: Manuscript writing & data collection.

Fauzia Parveen: Subject idea and proof reading.

Conflict of Interest:

The authors declare that they have no conflict of interest.

Source of Funding:

None

How to cite this article:

Shahid A, Rabia S, Parveen F. Knowledge and attitude of contraception among nursing and midwifery students *J Surg Pakistan*. 2018;23(1):35-40. doi:<http://dx.doi.org/10.21699/jsp.23.1.9>.