

Knowledge, attitude, and practice of family planning services among healthcare workers in Kashmir – A cross-sectional study

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ABSTRACT

Background: Researches have shown highest awareness but low utilization of contraceptives making the situation a serious challenge. Most of women in reproductive age group know little or have incorrect information about family planning methods. Even when they know the name of some of the contraceptives, they do not know where to get them or how to use it. These women have negative attitude about family planning, whereas some have heard false and misleading information, the current study aimed in assessing the knowledge, attitude, and practice of family planning among female healthcare workers in Kashmir valley. **Method:** A self-administered questionnaire was served to the female multipurpose health workers of District Anantnag and Baramulla at a training conducted in Department of Community Medicine, Government Medical College, Srinagar, Kashmir. **Result:** All the participants had heard about family planning methods. The major sources of information were trainers (78.8%). About 90.4% of the study participants gave correct response regarding the types of family planning. About 80.1% of the respondents had a favorable attitude toward family planning. Around three-fourths of the study participants practiced one or other method of family planning. **Conclusion:** Our study lead to the conclusion that the level of knowledge and attitude toward family planning was relatively low and FP utilization was quite low among the healthcare workers. In order to imbibe positive attitude among general public, the health workers need to be trained so as to inculcate the positive attitude in them leading to increased awareness among general public with regard to family planning.

Keywords: Family planning, healthcare workers, rural health care

Introduction

Family planning is a way of thinking and living that is adopted voluntarily upon the bases of knowledge, attitude, and responsible decisions by couples and individuals.^[1] Family planning refers to a conscious effort by a couple to limit or space the number of children they have through the use of contraceptive methods.^[2] Family planning deals with reproductive health of the mother, having adequate birth spacing, avoiding undesired pregnancies and abortions, preventing sexually transmitted diseases, and improving the quality of life of mother, fetus, and family as a whole.^[3]

A woman can get pregnant if one of man's sperm reaches her egg (ovum). Contraception tries to stop this either by stopping egg production or by keeping the egg and the sperm apart or by stopping the implantation of the fertilized egg into the uterus. Contraception in the simplest terms is the prevention of pregnancy and contraceptive methods, by definition, are the preventive methods to help women avoid unwanted pregnancies.^[4]

The global population today stands at 7.7 billion and is expected to reach 9 billion by the year 2045.^[5] Increasing population is a global problem today and India having one-fifth of the world population and a growth rate of 16 million each year is the

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second most populated country in the world.^[4] Uncontrolled population growth has been recognized as the most important impediment to our national development, despite the fact that India was the first country in the world to adapt a national population control program in 1952.^[6] So, it is important at global as well as national scale to ensure that all pregnancies are wanted or intended.

Use of contraceptives can prevent at least 25% of all maternal deaths by preventing unintended pregnancies and unsafe abortions and also protect against sexually transmitted infections,^[7] such as Human Immunodeficiency Virus (HIV), Chlamydia, Syphilis, etc., A lack of knowledge of contraceptive methods, source of supply, cost, or poor accessibility are the barriers that exist in developing countries.^[8]

Currently, short-term modern family planning methods are available at all levels of governmental and private health facilities, whereas long-term methods are being provided in health centers, hospitals, and private clinics.^[9] The study done in Jimma, Ethiopia, showed that good knowledge about contraceptives does not necessarily match with the high contraceptive practice.^[10]

WHO has developed recommendations on which types of health workers can safely and effectively provide specific family planning methods. WHO based these recommendations on the evidence that a wide variety of providers can safely and effectively provide contraception. Specific competency-based training and continued educational support help all types of healthcare providers do a better job at providing family planning.^[11] In India, the spacing methods of contraception, viz. IUCDs (intrauterine contraceptive devices), OCPs (oral contraceptive pills), and Condoms are available at the public health facilities beginning from the subcenter level. Since OCPs, Condoms, and emergency contraceptive pills are not skill-based services, they are made available through trained ASHAs (accredited social health activists) and FMPHWs (female multipurpose health workers). Permanent methods of contraception viz. vasectomy and tubal ligation are generally available at primary health center level or above. They are provided by MBBS doctors or gynecologists who have been trained to provide the services.^[12] If healthcare workers do not have an apt knowledge and a favorable attitude to practice family planning, the acceptance level and compliance of family planning services by their beneficiaries from those healthcare workers will be compromised. For primary healthcare physicians to comprehend the strategy that would be required to promote family planning services they need to know the level of knowledge, attitude of their team workers, and thus having an idea about their practice, ultimately their counseling drive and intent of motivation to beneficiaries.

Different researchers showed that the highest awareness but low utilization of contraceptives making the situation a serious challenge.^[13,14] Organizations' goal to promote family planning have suffered whenever the primary care human resource

especially physicians did not have apt knowledge and favorable attitude toward family planning.^[15] Most of reproductive age women know little or have incorrect information about family planning methods. Even when they know some names of contraceptives, they do not know where to get them or how to use it. These women have negative attitude about family planning, whereas some have heard false and misleading information^[16,17] and this study is aimed in assessing the knowledge, attitude, and practice (KAP) of Family Planning among women of health care workers in Kashmir valley.

Materials and Methods

A self-administered questionnaire was served to the female multipurpose health workers of District Anantnag and Baramulla who were present for a training session conducted in Department of Community Medicine, Government Medical College, Srinagar, Kashmir. This questionnaire was designed to explore KAPs about the available forms of Family planning methods. The data was analyzed and the results were presented as percentages and applying the non-parametric Kruskal–Wallis test. The results presented below pertain to KAP of health care workers.

Data processing and analysis

The collected data was cleaned, entered and analyzed using SPSS version 23 software. Descriptive statistics were employed to describe socio-demographic, KAP variables. Kruskal–Wallis test was used to determine association between variables. Associations were considered statistically significant when *P* value was <0.05.

Results

Sociodemographic characteristics of participants

Among 94 participants, 52 were from Anantnag and rest from Baramulla. About 54% of the participants were Diploma holders. The monthly household income of the majority (71.3%) of the participants was less than Rs 12,000. Regarding the family size of the participants, majority (34.1%) of them had two or more children. The mean age of participants was 30.3 ± 4.9 years [Table 1]. Almost two-third (68.1%) of participants were married, and 29.8% were single by their marital status.

Knowledge status of participants

All of the participants had ever heard about family planning methods. The major sources of information were trainers (78.8%) and self-study (9.8%). About 90.4% of the study participants gave correct response regarding the types of family planning. About 80.9% gave correct response regarding short-term hormonal contraceptive methods, 78.7% gave correct response regarding long-term hormonal contraceptive methods, 90.4% gave correct answer regarding permanent method of contraception, and 68.1% gave correct response regarding traditional methods of family planning.

Table 1: Sociodemographic variables of respondents

Age groups	Frequency (n=94)	Percent
≤24	10	10.6
25-29	39	41.5
30+	45	47.9
Total	94	100.0
Income	Frequency (n=94)	Percent
≤15,000	72	76.6
15,001-20,000	15	16.0
20001+	7	7.4
Age at marriage	Frequency (n=62)	Percent
≤22	12	19.4
23-29	39	62.9
30+	11	17.7
Length of married life	Frequency (n=51)	Percent
	24	47.1
1-5	15	29.4
6-10	8	15.7
11+	4	7.8
Number of children	Frequency (n=55)	Percent
1	20	36.4
>1	35	63.6
Number of trainings attended	Frequency (n=94)	Percent
≤3	56	59.6
>3	38	40.4
Years of experience	Frequency (n=94)	Percent
≤4	44	46.8
>4	50	53.2

Attitude status of participants

The majority (80.1%) of the respondents had a favorable attitude toward family planning. Out of the married participants, 57.4% had favorable attitude from their husbands toward family planning. Around 80% of the respondents had discussed adoption of family planning method and among them 45.7% had discussed it with their husbands. About 93.6% of the respondents encourage having appropriate gap between child birth. About 76.6% encouraged other married women for using family planning methods. Around one-fourth of respondents think that family planning method raises standard of living.

Practice on family planning

Around three-fourths (72.3%) of the study participants practiced one or other method of family planning. About 66.3% respondents think that adoption of family planning method leads to proper care of children. Half of the respondents were motivated by a doctor for adoption of a family planning method. Among participants who were married around three-fifth (60.3%) of respondents were currently practicing a family planning method. Among all participants around two-fifth (41.8%) of respondents intended to use a family planning method in future. Around two-fifth of respondents were using condoms as a family planning method.

Association of sociodemographic characteristics and mean KAP Scores

The association of demographic characteristics and mean KAP scores is presented in Table 2. Among the demographic variables, family type and income was significantly associated with mean knowledge ($P < 0.05$). Marital status and length of married life was significantly associated with attitude scores ($P < 0.05$), whereas age group, marital status, length of married life, family type, number of children, and number of trainings were significantly associated with practice scores ($P < 0.05$) [Table 2].

Correlation between KAP

Correlations were interpreted using the following criteria: 0–0.25 = weak correlation, 0.25–0.5 = fair correlation, 0.5–0.75 = good correlation, and > 0.75 = excellent correlation.^[18] The correlation revealed significant positive linear correlations between knowledge–attitude ($r = 0.252$, $P < 0.05$) knowledge–practice ($r = 0.025$, $P = 0.87$), and attitude–practice ($r = 0.143$, $P = 0.33$). The result reaffirms the relationship between KAP as shown in Table 3.

Discussion

Although India has a National Family planning program since 1952 at the primary care level and major efforts have been taken from time to time to improve its coverage and accessibility by involving the primary care level workers, but increasing program coverage is not enough unless all eligible women have adequate awareness as well as favorable attitude and a correct and consistent practicing of family planning methods as per their need. Increase of awareness, knowledge, and favorable attitude for family planning activities of eligible women are strongly recommended^[19] and it is essential that the healthcare workers especially the primary care physicians themselves have sound knowledge, favorable attitude, and practice family planning. The results of this study showed that all of respondents had ever heard of family planning and their major source of information were trainings (78.8%), the majority (80.1%) of the respondents had a favorable attitude toward family planning and around three-fourths (72.3%) of study participants practiced one or other method of family planning. This finding was lower than a study conducted in Jimma zone, Southwest Ethiopia,^[10] and another study done in Rohtak district, India.^[20] The difference may be because the study done in Jimma zone, involved only coupled or married women. However, the findings were higher than a study conducted in Northwest Ethiopia in 2018.^[14]

Previous studies have documented clear differences in family planning care provided by community health centers and other primary care providers compared with specialized family planning organizations, such as Planned Parenthood.^[21,22]

A case study from Texas expands on these findings by demonstrating the challenges that can arise when primary care providers, particularly those with limited experience in

Table 2: Comparison of demographic characteristics and mean KAP scores of participants

Description	n	Percentage	Knowledge score (mean rank)	P	N	Percentage	Attitude score (mean rank)	P	n	Percentage	Practice score (mean rank)	P
Age groups												
≤24	8	10.2	33.31	0.157	5	8.47	19.40	0.245	4	6.34	30.38	0.010
25-29	31	39.7	35.82		21	35.59	31.14		27	42.85	24.69	
≥30	39	50	43.69		33	55.93	30.88		32	50.79	38.38	
Marital status												
Single	22	28.94	32.93	0.103	11	18.96	37.73	0.036	15	24.59	20.93	0.007
Married	54	71.05	40.77		47	81.03	27.57		46	75.40	34.28	
Age at marriage (year)												
≤22	9	16.98	26.00	0.511	8	18.60	21.00	0.963	8	17.77	23.00	1.000
23-29	33	62.26	28.45		29	67.44	22.19		31	68.88	23.00	
≥30	11	20.75	23.45		6	13.95	22.42		6	13.33	23.00	
Length of married life												
<1	19	46.34	17.61	0.090	10	34.4	16.50	0.009	12	35.29	11.67	0.030
1-5	13	31.70	22.77		10	34.4	15.05		13	38.23	19.81	
6-10	6	14.63	29.50		6	20.6	16.50		6	17.64	19.42	
>10	3	7.31	17.83		3	10.3	6.83		3	8.82	27.00	
Children												
1	17	34.00	24.68	0.728	12	28.57	20.58	0.731	15	38.46	14.83	0.015
>1	33	66.00	25.92		30	71.42	21.87		24	61.53	23.23	
Family type												
Nuclear	23	29.48	46.50	0.041	19	32.20	32.82	0.313	17	27.41	39.29	0.027
Joint	55	70.51	36.57		40	67.79	28.66		45	72.58	28.56	
Education												
10 th Pass	10	12.82	40.50	0.407	9	15.25	28.72	0.390	5	7.93	39.10	0.683
12 th Pass	14	17.94	38.50		11	18.64	31.95		14	22.22	33.79	
Diploma	40	51.28	36.92		28	47.45	32.20		30	47.61	29.75	
Graduate	14	17.94	47.14		11	18.64	23.50		14	22.22	32.50	
Income												
≤15,000	59	75.64	35.92	0.017	44	74.57	30.57	0.603	44	69.84	33.47	0.580
15,001-20,000	12	15.38	51.33		8	13.55	31.44		12	19.04	27.92	
>20,000	7	8.97	49.43		7	11.86	24.79		7	11.11	29.79	
Years of experience												
≤4	35	44.80	38.70	0.672	27	45.76	31.65	0.431	29	46.03	30.67	0.575
>4	43	55.11	48.15		32	54.23	28.61		34	53.96	33.13	
Number of trainings												
≤3	48	61.11	40.81	0.330	35	59.32	30.06	0.971	39	61.90	28.21	0.027
>3	30	38.41	37.40		24	40.67	29.92		24	38.09	38.17	

P-value of <0.05 was considered significant

Table 3: Correlation between knowledge, attitude, and practice scores

Variable	Correlation coefficient	P*
Knowledge-attitude	0.252	0.05
Knowledge-practice	0.025	0.87
Attitude-practice	0.143	0.33

*Correlation significant at 0.05 level (two-tailed)

reproductive health care, are expected to begin offering family planning services. They interviewed program administrators, which also revealed that women's health organizations more easily adapted to the requirement of integrating family planning and primary care services during the first year of the Expanded Primary Health Care program, pointing to the key role these providers have in the network of care for low-income women.

Unlike women's health organizations, primary care organizations in this study were first-time recipients of family planning contracts reported numerous operational challenges in launching a family planning program, whereas other established primary care contractors experienced difficulties expanding reproductive health services they offered. These agencies often had to train staff about the sexual and reproductive health issues that need to be addressed when women presented at their clinics. Similarly, administrators had to reorganize the delivery of care and develop strategies that would facilitate the provision of family planning services. While many respondents embraced these challenges and welcomed the opportunity to provide holistic care to women, the leadership at other organizations found that it was difficult to accommodate this shift to integrate family planning and did not believe such a focus was realistic for their setting or patient population. The reasons they cited, such as women's perceived

lack of need for contraception, competing service priorities, and reliance on patients to initiate discussions about contraception, correspond to other reports of primary care providers' barriers to contraceptive care.^[23-25] These findings suggest that even when funding is specifically tied to the provision of family planning, some community health centers and public health agencies may not be able to offer these services immediately and others may not readily adopt family planning at all into their model of care especially due to lack of commitment by the primary care physicians.

Primary care physicians who were already on the staff at these organizations often lacked training, and for some new contractors, clinician training was just one of many hurdles they faced starting a new family planning program. Even once providers were trained to place IUDs and implants, we found that not all of them felt comfortable offering these methods. As in other studies,^[26-28] respondents at some of these organizations described protocols for providing these methods that were not evidence-based and instead restricted provision to adult women with children and required them to make multiple visits for medically unnecessary services. These practices are burdensome and may prevent women from obtaining timely access to the highly effective methods they would like to use to prevent pregnancy.

Community health centers, as well as public health departments involving primary care physicians, can be important partners in expanding the existing network of family planning providers and ensuring women obtain the reproductive health care they need. However, the more limited scope of family planning services currently offered by many of these agencies suggests that they will only be successful if they are provided with technical assistance to enhance and strengthen these services, such as skills training to provide a full range of contraceptive methods and education about evidence-based practices that will facilitate women's timely access to care.^[22,29]

While it may take time for new organizations to develop this expertise, the current network of government organizations already provides this type of care, and as evidenced by the current study, also more easily integrated family planning and primary care services and could provide more comprehensive care to new and existing clients but if the human resource including the primary care level workers do not possess apt knowledge and favorable attitude. It might lead to failure of the family planning service due to noncompliance.

Around 60.3% of respondents were currently practicing a family planning method which is almost in line with a study done in Cambodia^[30] and higher than a study done in rural part of Jordan^[31] and another study in India,^[31] but it was lower than studies conducted in Jimma zone, Ethiopia,^[10] Rohtak district, India,^[20] urban slum community of Mumbai,^[32] and in Sikkim,^[33] India^[34] in which 64%, 62%, 65.6%, and 62% of participants, respectively, used family planning. The difference might be due to the fact that the study participants in Jimma

zone, Rohtak, and Mumbai were relatively residing in a large city/town and this may help them to have a better access for family planning compared with this study. In this study, the most common contraceptive used was condom 47.6%, which is comparable to the study by Ashwini Nayak *et al.* in which most of them were using condom (59%),^[34] followed by OCPs (23.8%) and IUCD (15.8%). Among sociodemographic factors, family type and income was significantly associated with mean knowledge. Marital status and length of married life was significantly associated with attitude scores, whereas age group, marital status, length of married life, family type, number of children, and number of trainings were significantly associated with practice scores. Similar findings were found in a study conducted in Patiala.^[35] This study also showed that knowledge and attitude of the study participants were related to family planning utilization although weak on correlation. The attitude and practice also showed a correlation although weak, this might be due to the fact that attitude influences practice for specific activities.

Although primary care organizations experiences expanding family planning services in the region are unique to the recent policy history and constellation of programs in J and K state, the challenges identified in this study foreshadow the already available services at primary care level. Because the fundamental shifts in practices that would be required to provide the same evidence-based care at many primary care organizations may not take place immediately, low-income women wanting to prevent pregnancy may be unlikely to obtain services when they need them. Therefore, to fulfill the goal that all low-income women have access to comprehensive reproductive health care, publicly funded family planning programs should continue to support a robust and diverse network of providers, including specialized family planning organizations.

Conclusion and Recommendation

On the basis of observations of our study, it was concluded that knowledge and attitude of family planning methods were directly related to each other. The level of knowledge and attitude toward family planning was relatively low and the level of family planning utilization was quite low in comparison with many studies. Study participant's age group, marital status, length of married life, family type, number of children, and number of trainings were significantly associated with practice scores. Health workers should teach the community on family planning practices in a comprehensive manner so as to increase the awareness and develop a favorable attitude so that family planning utilization will be enhanced. Further, more studies are needed in exploring reasons affecting the nonutilizing of family planning and how these can be addressed.

Limitation of the Study

Since the data were collected using a self-administered questionnaires, some of the participants would have been

unable to understand the questionnaire completely and the reported KAP might be overestimated or underestimated. We did not utilize qualitative method of data collection to gather study participant's internal feeling about family planning, so that triangulation was possible. In addition, we did not take into consideration the barriers for utilizing contraception.

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Conflicts of interest

There are no conflicts of interest.

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