

A Study To Assess The Knowledge Of Women Regarding Prevention And Management Of Complications Of Cu-T Insertion And Identification Of Decision Makers In The Family In Choosing Family Planning Methods In Selected PHC's Of Kashmir Valley

Nighat Haffiz Reshi, Rifat Haffiz, Dr. Manju Chhugani and Sunita Rani Talwar

I. Introduction

India is the second most populous country in the world, with over 1.271 billion people (2015), more than a sixth of the world's population. Already containing 17.5% of the world's population, India is projected to be the world's most populous country by 2025, surpassing China, its population reaching 1.6 billion by 2050. Its population growth rate is 1.2%, ranking 94th in the world in 2013. The Indian population had reached the billion mark by 1998.

India has more than 50% of its population below the age of 25 and more than 65% below the age of 35. It is expected that, in 2020, the average age of an Indian will be 29 years, compared to 37 for China and 48 for Japan; and, by 2030, India's dependency ratio should be just over 0.4.

It is the largest democratic republic in the world and possesses 2.4% of world's land area and supports 10% of the world's population. (Saurabh, B.S, et al). Under the Eighth Five year Plan (1991-1995), achieving a slower rate of population growth was considered as one of the most important priorities facing the nation and during the Ninth Five Year Plan (1997- 2002), reduction in the population growth, mortality and achieving desired level of fertility. During the Tenth Five-Year Plan (2002-2007), the main approach of the Family Welfare Programme was: to assess the needs of reproductive and child health, meeting the unmet need for contraception, and promoting male participation in the Planned Parenthood.

Rowe AK. (2009) reported that according to UNFPA, each pregnancy multiplies a woman's chance of dying from complications of pregnancy or childbirth. Maternal mortality rates are particularly high for young and poor women, those who have least access to contraceptive services. It is estimated that one in three deaths related to pregnancy and childbirth could be avoided if all women had access to contraceptive services. Expanding access to client-centred information and services, where a range of effective contraceptive methods is offered and responsive counselling provided, reduces the number of unplanned pregnancies. These unintended pregnancies often lead to sub-optimal pregnancy care, unsafe abortions and overwhelmed mothers. As many as 50 per cent of pregnancies are unplanned, and 25 per cent are unwanted. The unwanted pregnancies are disproportionately among young, unmarried girls who often lack access to contraception. More than one quarter of pregnancies worldwide, about 52 million annually, end in abortion. Many of these procedures are clandestine, performed under unsafe conditions. About 13 per cent of maternal deaths are attributed to unsafe abortions, coupled with lack of skilled follow-up. In many developing countries, at least a third of women need contraceptive services. However,

- Some women do not know about modern methods, are unable to obtain or afford them, or distrust or dislike the methods that are available
- Single women and teenagers may be barred from obtaining contraceptive services
- Other women are ambivalent about whether they want a child or are unsure about their ability to become pregnant
- Still others live with a partner who does not approve of contraception or who wants them to become pregnant.

The UN Secretary-General's Global Strategy for Women's and Children's Health aims to prevent 33 million unwanted pregnancies between 2011 and 2015 and to save the lives of women who are at risk of dying of complications during pregnancy and childbirth, including unsafe abortion.

According to the United Nations Population Fund ([UNFPA](#) 30th December 2008). In developing countries: Every minute

146 women become pregnant who did not plan or wish it

90 women experience a pregnancy-related complication;

35 women have an unsafe abortion;

1 woman dies from a pregnancy-related cause

The main objectives of the study were to determine the prevalence of Cu-T complications among women and their knowledge regarding prevention and management of complications of Cu-T insertion and to determine the relationship between knowledge and the selected factors (age, religion, educational qualification, occupation, type of family, income, number of children, duration of copper-t insertion) and to identify the decision makers in the family in choosing family planning methods. The conceptual framework of the study was based on the "health belief model". The research approach adopted for the study was the descriptive survey approach. The convenience sampling technique was used to select study subjects. The sample consisted of 100 women attending selected PHC's of Kashmir.

The tools developed and used for data collection were structured interview schedule to obtain data as per the objectives. The reliability of structured interview schedule to assess knowledge was established by KR-20. The reliability was found to be 0.82. The reliability of structured interview schedule to determine prevalence of Cu-T complications among women and to identify the decision makers in the family in choosing family planning methods, was established by Test-Retest method and the reliability was found to be 0.86. Thus the tool was found to be reliable. For establishing validity, the tool was given to 11 experts from medical and nursing field. Data gathered were analyzed and interpreted in the light of the objectives using descriptive and inferential statistics.

Table- 1

Frequency and percentage distribution of study subjects by their demographic characteristics. **n=100**

S.No.	Demographic characteristics	Frequency/ percentage
1.	Age <ul style="list-style-type: none"> • Below 20 years • 21-30 years • 31-40 years • Above 41 years 	0 38 54 8
2	Religion <ul style="list-style-type: none"> • Hindu • Muslim • Christian • Others 	3 90 1 6
3	Education <ul style="list-style-type: none"> • No basic education [Illiterate] • Primary • Secondary • Graduate • Post Graduate • Any other 	20 35 25 15 5 0
4	Occupation <ul style="list-style-type: none"> • Housewife • Labourer • Private job • Government job 	78 8 4 10
5	Type of family <ul style="list-style-type: none"> • Nuclear family • Joint family • Extended 	43 42 15
6	Monthly income <ul style="list-style-type: none"> • Below Rs 5000 • Rs 5001-Rs10000 • Rs 10001-Rs 15000 • Above Rs 15000 	30 21 39 10
7	Age at marriage <ul style="list-style-type: none"> • Below 18 years • 19-25 years • 26-30years • Above 30 years 	20 64 11 5
8	Number of children <ul style="list-style-type: none"> • 1 • 2 • 3 • >3 	20 40 21 19
9	Duration of Cu-T insertion <ul style="list-style-type: none"> • 6 months-1 year • 1 year-2 years • 2 years-3 years 	25 29 26

	<ul style="list-style-type: none"> • 3 years-4 years • 4 years-5 years • Above 5 years 	17 3 0
10	Frequency of menstruation <ul style="list-style-type: none"> • <20 days • 20-23 days • 24-27 days • 28-31 days • More than 31 days 	1 6 21 56 16
11	Personnel who inserted Cu-T <ul style="list-style-type: none"> • Doctor • Nurse • LHV • ANM 	73 9 9 9
12	Gloves worn while inserting Cu-T <ul style="list-style-type: none"> • Yes • No 	97 3
13	Number of pads used during menstruation <ul style="list-style-type: none"> • <2 • 2-4 • 4-6 	0 52 48

TABLE-2
Frequency and Percentage Distribution of Study Subjects by Prevalence of Complications of Cu-T Insertion
n=100

Sr.No.	Complication	Yes (Frequency/ Percentage)	No (Frequency/ Percentage)
1	Irregular menstrual bleeding	7	93
2	Excessive bleeding	9	91
3	Bleeding in between menstrual cycle	5	95
4	Excessive vaginal discharge	12	88
5	Foul smelling vaginal discharge	6	94
6	Increased urinary frequency (Polyuria)	3	97
7	Pain during sexual intercourse	3	97
8	Fever with chills	5	95
9	Nausea and vomiting	2	98
10	Husband get hurt during sexual intercourse.	1	99
11	Backache -Lower area -Upper area -Pain in the whole back area	11 8 1 2	89
12	Pain abdomen -Lower abdomen -Upper abdomen -Pain in the whole abdomen.	3 2 0 1	97

Table – 3
Frequency and percentage distribution of level of knowledge of Study Subjects.

Level of Knowledge	Frequency	Percentage
Adequate	30	30%
Inadequate	70	70%

n=100

Adequate knowledge \geq 50%
Inadequate knowledge \leq 50%

Findings related to relationship between Knowledge Score and Selected Factors.

This section deals with the findings related to determination of the relationship of knowledge scores with selected variables viz.

- Age.
- Religion.
- Educational qualification.
- Occupation.
- Type of family.
- Income.
- Number of children.
- Duration of Cu-T insertion.

To establish relationship between knowledge score and selected variables, chi square was computed.

Table- 4
Chi Square Showing Relationship between Age and Knowledge .
n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Age			
<30	20	18	0.38
>30	36	26	

X² (1)=3.84, at 0.05 level of significance

The data in table 11 shows that the computed chi- square value is (0.38), which is lesser than table value of 3.84 at df (1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with age of women with Cu- T insertion.

Table- 5
Chi Square Showing Relationship between Religion and Knowledge score **n=100**

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Religion			
Muslim	51	39	0.16
Non-Muslim	5	5	

X² (1) =3.84, at 0.05 level of significance

The data in table 12 ,shows that the computed chi- square value is (0.16), which is less than table value of 3.84 at df (1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with religion of women with Cu-T insertion.

Table- 6
Chi Square Showing Relationship between Education and Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Educational qualification			
Illiterate	44	10	32.21*
Literate	12	34	

X² (1)= 3.84, at 0.05 level of significance

* -Significant at 0.05 level

The data in table 13, shows that the computed chi- square value is (32.21), which is greater than table value of 3.84 at df(1). This shows that the chi square value is significant at 0.05 level. Thus, indicating that there is significant relationship of knowledge with education of the women with Cu- T insertion.

Table-7
Chi Square Showing Relationship between Occupation and Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Occupation			
Unemployed	51	35	2.70
Employed	5	7	

X² (1)=3.84, at 0.05 level of significance

The data in table 14, shows that the computed chi- square value is (2.70), which is less than table value of 3.84 at df(1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that the knowledge score have no relationship with occupation of women with Cu-T insertion.

Table- 8
Chi Square Showing Relationship between Family Type and Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Family type			
Nuclear	24	19	0.23
Joint	24	18	
Extended	8	7	

X²(2) = 4.99, at 0.05 level of significance

The data in table 15 shows that the computed chi- square value is (0.23), which is lesser than table value of 4.99 at df (2). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with family type of women with Cu-T insertion.

Table- 9
Chi Square Showing Relationship between Monthly Income and Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Monthly Income			
<Rs 10,000	32	19	1.92
>Rs 10,000	24	25	

X² (1)=3.84, at 0.05 level of significance

The data in table 16 shows that the computed chi- square value is (1.920), which is less than table value of 3.84 at df (1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with monthly income of women with Cu-T insertion.

Table- 10
Chi Square Showing Relationship between No. of children And Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
No. of children <2	32	28	0.43
>2	24	16	

X² (1)=3.84 , at 0.05 level of significance

The data in table 17 shows that the computed chi- square value is (0.43), which is less than table value of 3.84 at df(1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with number of children of women with Cu-T insertion.

Table- 11
Chi Square Showing Relationship between Duration of copper T insertion And Knowledge score n=100

Selected Variable	Knowledge score		X ²
	Below Mean	Above Mean	
Duration of copper T insertion <3 years	32	22	0.50
>3 years	24	22	

X² (1)=3.84, at 0.05 level of significance

The data in table 18 shows that the computed chi- square value is (0.50), which is less than table value of 3.84 at df (1). This shows that the chi square value is not significant at 0.05 level. Thus, indicating that knowledge score have no relationship with duration of Cu-T insertion of women.

Table-11
Frequency and Percentage Distribution of Study subjects by Their Decision Makers n=100

S.No	Decision about Family Planning	Frequency/ Percentage (%)
1	Dominating person in the family	
	Self	11
	Husband	45
	Jointly by husband and wife	20
	Mother-in-law	17
	Grand mother	2
	Mother	1
	Sister	1
2	Decision maker regarding choosing the method	
	Self	6
	Husband	30
	Jointly by husband and wife.	43
	Mother-in-law	14
	Grand mother	1
	Mother	3
	Sister	2
3	Women's perception regarding the best decision maker	
	Self	11
	Husband	28
	Jointly by husband and wife.	49
	Mother-in-law	6
	Mother	3
	Sister	2
	Sister-in-law	1

Table-12
Frequency and Percentage Distribution of Study subjects by Their Decision Makers n=100

S. No.	Complications	Frequency Percentage	
		YES	NO
1	Self ability to make decision -Decision will not prevail -Disagreement with husband -Anger from family members	69	31 17 6 8
2	Decisions taken in all matters	51	49
3	Agreement of decision makers upon the decisions made by women	64	36
4	Repentance of women over decisions made by decision maker	63	37
5	Support from decision maker to any particular family planning related problems	69	31
6	Acceptance of consequences by decision maker at the failure of any chosen family planning method	69	31
7	Problems faced by adopting the decisions made by decision maker -Health problems -Psychological problems -Financial burden	53 16 22 15	47
8	Perception that life turns better by adopting the family planning method -Children taken care of -Own health protected -Husband taken care of -Household chores taken care of -All the above	90 11 20 11 16 32	10
9	Sharing the decision about adopting the family planning method with other family members	50	50

II. Discussion

Findings of the study are discussed in terms of objectives and theoretical bases.

Women with Cu-T were having irregular menstrual bleeding. These findings were consistent with the findings of **Hubacher D, et al (2009)**. They conducted a study on the side effects from the copper IUD to find whether they increase over time. The study showed that irregular menstrual bleeding and pain complaints remain unchanged. **H.M Veldhuis, et al (2004)**, conducted a retrospective cohort study regarding complications and symptoms of the intrauterine device. Results of the study showed that main reasons for removal were ‘menstrual problems’ (irregular menses). **Patai .K and Berényi .M, (2002)** conducted a study on complications from the use of Cu IUD. The most common side effect of Cu IUD use was excessive bleeding. **H. Salzer, et al (2000)** carried out a retrospective study on “Intrauterine contraception with Cu-T intrauterine device”. Results showed menstrual disturbances (20.1%) necessitating removal of the device in (5.7%) women

Women with Cu-T insertion were having excessive menstrual bleeding. These findings were consistent with **J.E Bradley,et al (2009)**. They conducted a retrospective study on IUD’s in Bangladesh. 20% women reported excessive menstrual bleeding. In the present study, only 9% women reported excessive menstrual bleeding. **Imperato F, et al (2002)**, conducted a prospective study on the role of copper releasing intrauterine device on uterine bleeding. The study also revealed menorrhagia among women using Cu-T. **Patai .K and Berényi .M, (2002)** conducted a study on complications from the use of IUD. The study revealed that most common side effect of IUD use was excessive bleeding.

Women with Cu-T were having excessive vaginal discharge. These findings were consistent with **Broso, P. R and Buffetti,G (2004)**. They conducted a study on uterine perforation associated with IUD insertion. They revealed that major health risks associated with IUD use were perforation of the uterus and pelvic inflammatory disease. **Skajaa K, R et al (2002)** conducted a retrospective study on “Complications caused by intrauterine contraceptive devices. The results showed that excessive vaginal discharge (infection) occurred.

Women with Cu-T insertion were having pain abdomen and backache. These findings were consistent with **H. Salzer, et al (2000)**. They carried out a retrospective study on “Intrauterine contraception with Cu-T intrauterine device”. Results revealed that the most frequent complication were menstrual disturbances (20.1%),

pain abdomen (9.5%), backache (10%), cervicitis (18.3%), necessitating removal of the device in 5.7%, 2%, 2.2% and 5.1% respectively.

In the present study, women with Cu-T insertion complaint of backache, vaginal discharge, pain lower abdomen and menorrhagia. These findings were consistent with **Agarwal, K and Sharma, U (2004)**. They conducted a clinical study on microbial and cytopathological changes in IUCD users in a tertiary care hospital. The study showed chief complaints of IUCD users included backache (54%), vaginal discharge (46%), pain lower abdomen (34%), dyspareunia (22%), menorrhagia (18%) and dysmenorrhoea (14%).

Majority of women were dominated by husbands regarding family planning decisions. These findings were consistent with **Rakshan, F, et al 2010** who conducted a qualitative study to understand more about couple's decision-making and to understand the role of men in family planning. All participants believed that men have an important role in family planning. **Yadav, K, et al (2010)** conducted a study to assess the levels of agreement and concordance between husbands and wives regarding reproductive intentions and contraception in rural Ballabgarh, India. An in-depth analysis of the responses in the study provided evidence of male domination in decision making. **Nguyen, T.H, et al (2009)** conducted a study on decision-making in family planning among selected acceptors. The study revealed that process of decision-making to adopt family planning came as a result of preparatory discussions between the couples, husbands made the final decision in the adoption of family planning.

III. Conclusion And Recommendations

The study findings indicate that there is lack of knowledge among women regarding prevention and management of complications of Cu- insertion and hence there is need to educate and to give information to women regarding prevention and management of complications of Cu- insertion. Based on the study findings it is recommended that similar study may be replicated on large samples, also a comparative study may be conducted to find the knowledge of women in rural and urban settings regarding prevention and management of complications of Cu-T, also a comparative study may be undertaken to find out the decision makers in the family in choosing family planning methods between literate and illiterate women.

References

- [1]. Saurabh,B.S,et al, On the estimation of parity progression and instantaneous parity progression ratios, In Population Transition In India (eds.), 1, D.K. Publishers, New Delhi, (1989) , pp 357-362.
- [2]. Hubacher, D et al (2009), "Do side effects of Cu IUD decrease overtime". American Journal Of Contraception.171(3):691-693.
- [3]. Veldhuis,H.M ,et al (2009), "Intrauterine devices and pelvic inflammatory disease: recent developments ".Contraception.36(1):97-109.
- [4]. Patai,K and Berenyi,M (2002), "Postcoital contraception –Has its day come?" Journal of Nurse Midwifery. 39(6):363-369.
- [5]. H,Sclzer, Andurkar ,S.P et. al(1991), "Intention not to use contraceptives. A Retrospective Study of India". Demography India.30(2):261-280.
- [6]. Agarwal,K and Sharma,K(2004), "Intrauterine contraceptive devices. Complications associated with their use". International Family Planning Perspectives. 28(4):182-86.
- [7]. Rakshan,F,et al (2010), "Contraception in Nepal: Women's Autonomy and the Importance of Husbands". Studies in Family Planning.18(3): 157-168.
- [8]. Yadav V.B,et. al(2010), "Influence of mothers-in-law on young couples' family planning decisions in rural India". Studies in family planning.18 (35):154-162.
- [9]. Nguten,T.H, et al (2009), "Contraceptive decision making amongst men and women". Studies in barriers to Contraceptive use. 22(2):45-54.