# ORIGINAL ARTICLE COMPARISON BETWEEN USES OF CONTRACEPTIVE METHODS IN LHW COVERED AND LHW UNCOVERED AREAS

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Background: Family planning is of great importance in population dynamics as unregulated fertility negatively affects the economic stabilization of the country. Family planning is considered an effective way for the improvement of child and maternal health and reduces the maternal and perinatal morality. Total contraceptive prevalence rate (CPR) in Pakistan is 29% even of the fact that 97% Pakistani women know only one method of contraception. This study compares the contraceptive usage among LHW covered and LHW uncovered areas. Methods: This was a comparative cross-sectional study, which was conducted in LHW covered, and un covered areas in tehsil Takht Bai of district Mardan from August to December 2016. Samples of 102 families were selected randomly. All those females who were married, in reproductive ages (15-49 years) and were not pregnant were included in the study. Results: Out of total 102 females 44 (43.1%) were from LHW covered areas while 58 (56.9%) were from LHW uncovered areas. Overall knowledge about various birth control methods was more in uncovered areas, i.e., 71.4% than the covered ones which was 28.6%, p=0.67 and most ladies knew only about the contraceptive pills as compared to other methods. No statistical difference p=0.86 was found in usage of contraceptive methods among couples living in LHW covered and uncovered areas. Conclusion: This study highlights contraceptive usage and role of national program for family planning and primary health care in promotion of contraception. A lot more has to be done for the improvement of family planning services in the community.

Keyword: Contraception; Family planning; LHW

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## **INTRODUCTION**

A major issue of the world today is unplanned pregnancy and its prevention is a key consideration by the researcher.<sup>1</sup> More than 130 million women of the developing countries do not want to get pregnant but are not exercising family planning. Satisfying the unmet need for contraceptive services in developing countries could avert most of the 76 million unintended pregnancies that occur each year in the developing world<sup>2</sup> resulting in unwanted population explosion. An important factor for checking this exponential growth is contraception

Pakistan is ranked 7<sup>th</sup> largest country in the world population-wise with around 180 million population.<sup>3</sup> and if the growth rate remains the same it will be the fourth most populous country by the year 2030 according to UN projections.<sup>4</sup> As unregulated fertility is effecting economic stabilization of the country, the family planning is considered a key factor in controlling population dynamics.<sup>5</sup> Family planning is an effective way to improve maternal and child health and also reduces maternal as well as perinatal mortality.<sup>6</sup> Around 97%, of Pakistani women know at least one contraception

method.<sup>7</sup> In Pakistan total contraceptive prevalence rate (CPR) is 29%.<sup>8</sup>

In our country, one LHW serves 1,000 people in the community through monthly home visits. This programme has covered around 60% of Pakistan population mostly in rural areas via around 90,000 LHWs throughout the country. An average of PKR 44,000/year is incurred on each worker.9 This study was conducted to measure the prevalence of contraceptive use among LHW covered and LHW uncovered areas, among educated and non-educated subjects, to know the most frequently used contraceptive methods and to compare awareness rate about the use of contraceptives among the two populations.

## MATERIAL AND METHODS

It was a cross-sectional comparative study conducted at LHW covered and non-covered areas in Tehsil Takht Bhai, District Mardan, from August to December 2016. A sample of 102 families has been selected randomly. All those females who were married, in reproductive ages (15–49 years) and were not pregnant were included in the study, while those who were unmarried, primigravida, nulliparous, women in their menopausal age and those who did not give consent were excluded from the study.

Following taking of oral consent, data was collected by subjecting each participant to answer the pre-designed questionnaire containing questions of interest and confidentiality was ensured.

Data was collected and analysed by using SPSS 23. Continuous variables like age were described as mean±standard deviation. Categorical variables like socioeconomic status etc were expressed as frequencies and percentages.

## RESULTS

Results showed that out of total 102 females 44 (43.1%) were from LHW covered areas while 58 (56.9%) were from LHW uncovered areas. Study results demonstrated non-significant difference pvalue =0.68 between education of the women in both areas table-1 Majority of females (50%) in uncovered area were not formally educated as compared to the covered area which showed 45.5% uneducated ladies. In both covered area and LHW uncovered area, majority of the women, around 65% each had fewer children, i.e., 1-4. Whereas only 9% and 12.7% respectively had more than 7 children table-2

A significant result p value of 0.00 of the study shows that 0% husbands were jobless in covered area. Where 24.1% husbands were jobless in

uncovered area and the socio-economic status was not good as shown in table-3, similarly more women were housewives (97.7%) in covered area compared to uncovered area where 84% were house wives and rest were working ladies.

Surprisingly, the overall knowledge about various birth control methods was more in uncovered area women, i.e., 71.4% than the covered one (28.6%). However, this difference was not significant (p=0.67). Most women knew about the pills compared to other methods. Bar Chart-1. In uncovered area their major source of knowledge were elders (53.8%) but about 19.2% came to know about birth control methods from LHWs of other areas

Results also revealed a non-significant difference p=0.86 between family planning utilization in LHW covered and uncovered area. Only 26.7% couples were using family planning methods in LHWs covered area while a significant percentage of 33.7% couples were using various methods of family planning in LHWs uncovered area Bar Chart-1

Results showed the most frequent method used in covered area was injections 10.8% while in the uncovered, condoms being the first 12.7% and injections 8.8%, the second most common method of family planning table-4.

Table-1: Educational status								
Area			Uneducated	Primary	Intermediate	Graduate	Total	<i>p</i> -value
		Count	20	15	7	2	44	
Covered	by	Percentage	45.5%	34.1%	15.9%	4.5%	100.0%	
LHW		% of total	19.6%	14.7%	6.9%	2.0%	43.1%	
		Count	29	20	5	4	58	0.68
Uncovered	by	Percentage	50.0%	34.5%	8.6%	6.9%	100.0%	
LHW		% of total	28.4%	19.6%	4.9%	3.9%	56.9%	
		Total	49	35	12	6	102	

Table-1. Educational status

Table-2:	No of	children
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Area			No of children	Total	<i>p</i> -value	
Alea		1-4 5-6		More than 7		
	Count	29	11	4	44	
Covered by	Percentage	65.9%	25.0%	9.1%	100.0%	
LHW	% of total	29.3%	11.1%	4.0%	44.4%	
	Count	36	12	7	55	
Uncovered by	Percentage	65.5%	21.8%	12.7%	100.0%	0.81
LHW	% of total	36.4%	12.1%	7.1%	55.6%	
	Total	65	23	11	99	

	Table-3: Occupation of husband										
Area			Husband's oOccupation						Total	р-	
Area		Jobless	Labourer	Teacher	Farmer	Other	Shopkeeper	Overseas	Driver	Totai	value
Covered by LHW	Count	0	18	3	1	10	6	4	2	44	
	percentage	0.0%	40.9%	6.8%	2.3%	22.7%	13.6%	9.1%	4.5%	100.0%	0.00
	% of total	0.0%	17.6%	2.9%	1.0%	9.8%	5.9%	3.9%	2.0%	43.1%	
TT 1	Count	14	25	5	0	0	8	6	0	58	
Uncovered by LHW	Percentage	24.1%	43.1%	8.6%	0.0%	0.0%	13.8%	10.3%	0.0%	100.0%	
	% of total	13.7%	24.5%	4.9%	0.0%	0.0%	7.8%	5.9%	0.0%	56.9%	
	Total	14	43	8	1	10	14	10	2	102	

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Area					Total	р-			
Alta		not using	Condom	coitus interruptus	injections	IUCD	any other	Totai	value
	Count	17	8	2	11	3	3	44	
Covered by LHW	percentage	38.6%	18.2%	4.5%	25.0%	6.8%	6.8%	100.0%	
	% of total	16.7%	7.8%	2.0%	10.8%	2.9%	2.9%	43.1%	
	Count	24	13	2	9	1	9	58	
Uncovered by LHW	Percentage	41.4%	22.4%	3.4%	15.5%	1.7%	15.5%	100.0%	0.44
	% of total	23.5%	12.7%	2.0%	8.8%	1.0%	8.8%	56.9%	
	Total	41	21	4	20	4	12	102	

#### Table-4: Type of family planning method

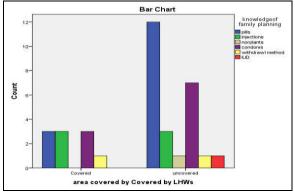


Figure-1: Knowledge of family planning methods

## DISCUSSION

The results of our study show that the overall percentage of contraceptive use is 60.4% combined in covered and un covered areas which is higher in comparison to other Muslim countries like Saudi Arabia (44.8%) and Qatar 47.8%<sup>10,11</sup> and Bahrain having the higher rates of  $(61.8\%)^{12}$ . The differences in the percentages may be due to local cultural values. In Islam, abortion and sterilization are prohibited except on medical grounds. Most of the religious scholars are unanimously agreed upon the point that if the life of the mother is at stake, only then any permanent method of family planning, or even abortion, can be done. The concept of family planning has raised some concerns regarding its acceptability within Muslim population.<sup>13</sup> This study also shows that the contraceptive use was higher amongst the women living in areas which lack formal family planning services as compared to the women living in areas with access to the services which is contrary to the previous studies which shows its higher rate in urban areas where health facilities are readily available.14

The current study found that contraceptive use was more in uncovered area where 50% of the people were uneducated as compared to covered area where less people were uneducated which is similar to the studies conducted in India that found education was not associated positively with contraceptive use.<sup>15,16</sup> and

contrary to studies conducted at UAE<sup>17</sup> and in Karachi, Pakistan.<sup>5</sup>

Awareness for contraceptive usage is valuable only if the information obtained is correct and utilized.<sup>18</sup> In our study elders and LHWs were the source of knowledge in uncovered and covered areas respectively. It is interesting to note that word of mouth is the most common source of information for women in these communities which is also supported by the previous research findings<sup>19</sup> and the most frequent method being used is condom among these families. The knowledge about most commonly used method of contraceptive, i.e., use of condom was mostly known by majority of the participants. It is also concurrent with the findings of Pakistan demographic health survey 2012–13.<sup>20</sup>

Potentially, condoms are preferred by most of the women as compared to other contraceptive methods because it can be purchased much easily without any prescription and it has no side effects as compared to other methods. During our study we observed that a few of the women were also aware of new methods of contraceptives like transdermal patches, implants and rings etc. as such there is an urgent need to increase awareness of contraceptive availability and options among women.<sup>17</sup>

In our study, most women faced no problem with the use of contraceptives however generally side effects of contraceptives were the main reason for early discontinuation and compliance difficulties were observed by women in other studies.<sup>21</sup>

## CONCLUSION

This study highlights contraceptive usage by majority of Pakistani women. Barrier method was the commonly used contraceptive method. People should be made aware of the new methods of contraceptives so that the utilization of family planning services could be improved. This all can be done with efforts and hard work of spreading information among the community of that area. Community outreach awareness campaigns on the availability and proper use of contraceptives are highly recommended.

## **AUTHORS' CONTRIBUTION**

MAA: Study conception, data analysis, proof reading. JZ, ZM, AQ: Data collection, data analysis, literature search. MJ: Data collection, data analysis. MAK: Helped in data collection and discussion writing.

## REFERENCES

- 1. Sarah P. The attack on planned parenthood: A historical analysis. UCLA Womens Law J 2012;19:165–211.
- Family planning. Populating council. [Internet]. [cited 2017 Apr 25]. Available from: http://www.popcouncil.org/topics/fps.asp
- Overcoming Pakistan's population challenge. Washington: Woodrow Wilson, International Centre for Scholars; 2010.
- Population Action International. Pakistan's daunting and deteriorating demographic challenge updated 2010. [Internet]. [cited 2017 Apr 25]. Available from: http://www.populationaction.org/blog/2009/04/ pakistansdauntingand-deterior.html
- Kazi K. A study of knowledge, attitude and practice KAP of family planning among the women of rural Karachi [thesis]. Karachi: University of Karachi; 2009.
- Tsui AO, McDonald-Mosley R, Burke AE. Family planning and the burden of unintended pregnancies. Epidemiol Rev 2010;32:152–74.
- Pakistan Demographic and Health Survey 2006-07. Family planning key findings. Islamabad: National Institute of Population Studies; 2008.
- 8. Pakistan Population Situation Analysis Major Findings 2006-07.
- 9. Hafeez A, Mohamud BK, Shiekh MR, Shah SA, Jooma R. Lady health worker programme in Pakistan: challenges, achievements and the way forward. J Pak Med Assoc 2011;61(3):210–14.
- Al Sheeha M. Awareness and use of contraceptives among Saudi women attending primary care centers in Al-Qassim, Saudi Arabia. Int J Health Sci (Qassim) 2010;4(1):11–21.

- Arbab AA, Bener A, Abdulmalik M. Prevalence, awareness and determinants of contraceptive use in Qatari women. East Mediterr Health J 2011;17(1):11–8.
- United Nations Department of Economic and Social Affairs. World contraceptive patterns 2013. [Internet]. [cited 2017 Apr 25]. Available from: www.un.org/en/development/desa/population/publications/pdf/fa mily/worldContraceptivePatternsWallChart2013.pdf
- El Hamri N. Approaches to family planning in Muslim communities. J Fam Plann Reprod Health Care 2010;36(1):27– 31.
- Naqvi S, Hashim N, Zareen N, Hassan Fatima H. Knowledge, Attitude and Practice of Parous Women Regarding Contraception. J Coll Physicians Surg Pak 2011;21(2):103–5.
- Murarkar SK, Soundale SG. Epidemiological correlates of contraceptive prevalence in married women of reproductive age group in rural area. Natl J Community Med 2011;2(1):78–81.
- Pushpa S, Venkatesh R, Shivaswamy MS. Study of fertility pattern and contraceptive practices in a rural area: A crosssectional study. Indian J Sci Technol 2011;4(4):429–31.
- Chudasama R, Godara N, Moitra M. Women's position and their behavior towards family planning. Internet J Fam Pract 2008;7:1–5.
- Kanwal N, Muttappallymyalil J, Al-Sharbatti S, Ismail I. Contraceptive Utilisation Among Mothers of Reproductive Age in Ajman, United Arab Emirates. Sultan Qaboos Univ Med J 2017;17(1):e50–8.
- Dehlendorf C, Levy K, Ruskin R, Steinauer J. Health care providers' knowedge about contraceptive evidence: a barrier to quality care. Contraception 2010;81(4):292–8.
- Azmat SK, Mustafa G, Hameed W, Ali M, Ahmed A, Bilgrami M. Barriers and perceptions regarding different contraceptives and family planning practices amongst men and women of reproductive age in rural Pakistan: a qualitative study. Pak J Public Health 2012;2(1):17–23.
- National Institute of Population Studies, MEASURE DHS, ICF International, Calverton, Maryland, USA. PAKISTAN Demographic and Health Survey 2012-13. Islamabad, Pakistan: National Institute of Population Studies, 2013; p.42.

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