

Utilization of Maternal and Child Health Care Services and Impact on Health of Muslims

Dr. Vijaya Khairkar,

Associate Professor, Department of Geography, University of Pune

Abstract:

Objective: To explore the availability, accessibility for maternal and child health care services among Muslims. **Design:** questionnaire survey one way ANOVA test has been applied to test the hypothesis. **Setting:** Health services in Malegaon **Participants:** sample of Momin (250), and Khandeshi (249) women. **Intervention:** 3 years action research to see the reality. **Main outcome measures:** The study shows that availability of health care services, both public and private is not proportionate with the population. **Result:** Age at marriage among women is less than 18 years. Women are much aware about antenatal care, Khandeshi (32.5 percent) and Momin (23.6 percent) women have home deliveries. Children of 41 percent Khandeshi and 16 percent Momin are suffered from morbidity. **Conclusion:** the study provide insights to improve the health and well-being for both mother and child.

Key Words: Health care, Utilization; Health workers; Maternal; Child Health;.

I. Introduction and Objective

Since the mid-1980s several studies have been carried out to identify the reason for maternal health care services are underutilized in developing countries [1] [2] [3] [4] [5] [6] [7] [8] [9]. An attempt has been made to study the status of maternal and child health care and availability, accessibility and utilization of health services have been explored with reference to the women in Momin and Khandeshi Muslim groups. The aim of the present study was to explore the availability, accessibility of maternal and child health care services in Malegaon. The factors affecting utilization of maternal and child health care services among two groups of Muslims have been deal with.

II. Methods

Multinomial regression method has been used to calculate the odds ratio One way ANOVA test has been applied to test the hypothesis.

III. Multiple Ring Buffer Zones of Government Hospitals in the City

The buffer zones of the government hospitals are distributed on the basis of distance. The distance ranges from 0.5 km to 2 km. A distance of 0.5 km indicates that the government hospitals are easily accessible and located at the convenient distance. The other zones within the radius of 1.5 km and 2 km show the accessibility of the same thorough road transport. Private health facilities in the city are well connected with the road network within the radius of 2 km distance. Multiple ring buffer zones are plotted considering the distance which ranges from 0.5 km to 2 km, in the city. Private nursing homes are accessible for people, except western area of the city (Figure 2).

Analysis

Antenatal care is necessary for women to identify the risk of pregnancy complications [10]. Place of antenatal checkups done for the last two pregnancies of women in both the groups is shown in the (Table,1). The analysis shows that 82 percent Momin women and 79 percent Khandeshi women have done antenatal checkups for their last but one pregnancy. (Figure 8). As far as the tests during pregnancy are concerned, among Khandeshi groups, 82 percent women and 83.5 percent women reported that they measured their weight during the pregnancy of their last and last but one child respectively. However, 25.1 and 16.9 percent Khandeshi women have done sonography for their last two pregnancies respectively. (Table.1)

Two vaccines of tetanus toxoid given to the pregnant women in the first and second trimester of the pregnancy are much effective in preventing tetanus among the newborn babies and mothers [11]. As per table 1 both Khandeshi (97 percent) and Momin women (91 percent) have taken IFA tablets regularly. In Khandeshi group, 8.8 percent women and in Momin group, 2.6 percent Khandeshi women have not taken IFA tablets or syrup at all. The causes for low consumption reported by women are side effects of iron tablets. The knowledge and literacy of women has significant bearing on antenatal care for pregnant women [12]. More than 60 percent

Khandeshi women received IFA tablets from anganwadi and ANM, while around 60 percent Momin women received from private hospitals and clinics. About 98 percent Khandeshi women and 80 percent Momin women had taken tetanus toxoid injection during their last pregnancy.

Factors affecting Use of Antenatal Care

Odds ratios of the same have been presented in table 2. The result shows that Khandeshi women in age group of 14-24 years are 23 times more likely to use the antenatal care services than women in the age of 35 years. However, Momin women in the age group of 25-34 years have 9 times less chances of using antenatal care services than the younger and elder women. In Khandeshi group, newly married women are 6 times more likely to go for antenatal care. In Khandeshi group poorer women are 11 times and in Momin group, poorer women 17 times more likely to receive antenatal checkups than those women who are in the poor and middle class category. In both the groups, visit of the health workers shows positive relationship with the use of antenatal care. In Khandeshi group, women who visited private health facility for the health care services are 16 times more likely to use the antenatal care services during pregnancy than those who avail services from government and anganwadi workers.

Delivery Care for Muslim Women

It is essential that delivery should be conducted under proper hygienic conditions with the assistance of a trained medical practitioner [13]. As per fig.4 in both the groups, 90 percent women reported problems during pregnancy, but only 50 percent women in both the groups seek treatment. Their delivery taken place at government hospitals, private hospitals and home. Around 45 percent Khandeshi women and 22 percent Momin women reported the place of delivery is government hospitals. As far as deliveries in private hospitals are considered, Momin women account more (54 percent) than the Khandeshi women (23 percent). Majority of the women prefer to be attended by lady doctors at the time of child birth. Thus, deliveries in the private hospitals indicate that the women prefer due to availability of the lady doctors and some women prefer private hospitals for better quality of care [14]. As far as birth attendants are concerned for the deliveries which occurred in government hospitals, 58 percent Khandeshi women and 73 percent Momin women reported that their deliveries are conducted by doctors. Those women who had delivery at home, 82 percent Khandeshi women and 83 percent Momin women reported that deliveries are conducted by untrained birth attendant (dai). Chi-square test shows the significant relationship between the place of delivery and the delivery assisted or attended by health professional in both the groups. (Table.3).

Factors affecting Utilization of Delivery Care Services among Muslims

Table.2 summaries the socio-economic and demographic factors of institutional deliveries have been analyzed. Odds ratios are calculated for women who had institutional deliveries. Dependant variable used for the analysis is institutional deliveries of women. The result shows that younger women in the age of 15-24 in Khandeshi groups have 10 times and women have 4 times more chance to have institutional deliveries than the women in the older age groups. Women with 1-2 children, Khandeshi women 11 times and Momin women 15 times more likely to go to the hospital for deliveries than those women who have more than 2 children. The educational attainment of women also shows the significant relationship with the institutional deliveries. Women in Khandeshi group with more than secondary and higher secondary education is 7 times and Momin women 3 times less likely to have deliveries at home than the women who have only primary schooling. Women who have married since 1-3 years, Khandeshi women 5 times and Momin women 3 times possibly to have institutional deliveries. Khandeshi women in the poorer strata have 1 time more chance of having delivery at home, whereas, in Momin women, there is 3 times more possibility of women having deliveries at home.

Post Natal Care of Muslim Women in Malegaon

The analysis of visit to the health workers depicts that 23 percent Khandeshi women and 6 percent Momin women reported that health workers visited their homes within 42 days after the delivery. (Table.4). exclusively breastfed babies have less chance to get infected or die from diarrhoea, than those babies who are not breastfed or partially breastfed. The analysis shows that 25 percent Khandeshi woman and 16 percent Momin women, started breastfeeding immediately after birth of baby. In Khandeshi group, 68 percent women and 37 percent Momin women reported that they had squeezed out their first breast milk after the delivery before feeding the baby first time (Table.5).

IV. Results

Age at marriage among women is less than 18 years for both groups. They are much aware about antenatal care, 90.6 percent Khandeshi and 69.6 percent Momin women are availing the ANC facilities but only 1.5 percent women check for HIV Test. 89 percent women are facing the problem during pregnancy. 50-60

percent women of reproductive age group are not using any contraceptives. Children, 41 percent Khandeshi and 16 percent Momin women suffered from morbidity.

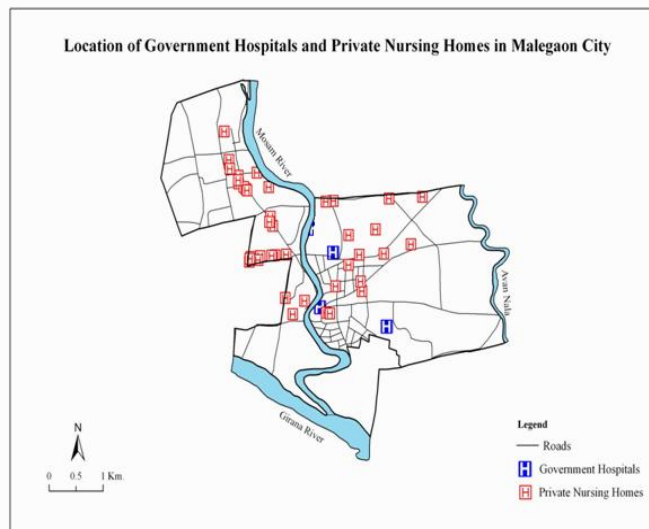
V. Discussion and Conclusion

Present study examines the prevalence and determinants of use of maternal and child health care services in two groups of Muslims in Malegaon. The study shows that availability of health care services both public and private is not proportionate with the population of the city. Health facilities do not provide all kind of maternal and child health care services to the mother and child. The distance for accessing the health care services does not make much difference in the use of health care services. Access of the facility is connected with the road network. Knowledge of women on importance of maternal and child health care services are major factor which reduces the utilization of health care services. The analysis demonstrates that in both the groups, the prevalence of maternal and child health care services exist, but there is the variation in the type of health facility. Like Momin women tend to use private services more for antenatal and child care services than Khandeshi women, The factors like age of mother, age of last child, number of children, years of married life of women, educational attainment, status and standard of living are the significant factors which affect the utilization of health care services in both the groups. The odds ratios explain the variation in the use of health care services. It makes clear that women with lesser number of children, during 1-3 years of marriage and with primary education, use health care services more than their counterparts. The level of acceptance of iron supplementation in the pregnant women is low. The compounding factors suggest that Khandeshi women are using health care services more than the Momin women, because Khandeshi women are comparatively much empowered than the Momin women. The traditional influence is found on women and their families as far as maternal and child health is concerned. Quality of health services, accessibility towards health services and education are significant factors as far as utilization of health services is concerned. There is an urgent need to improve the health facility and awareness about the facility in this place.

References:

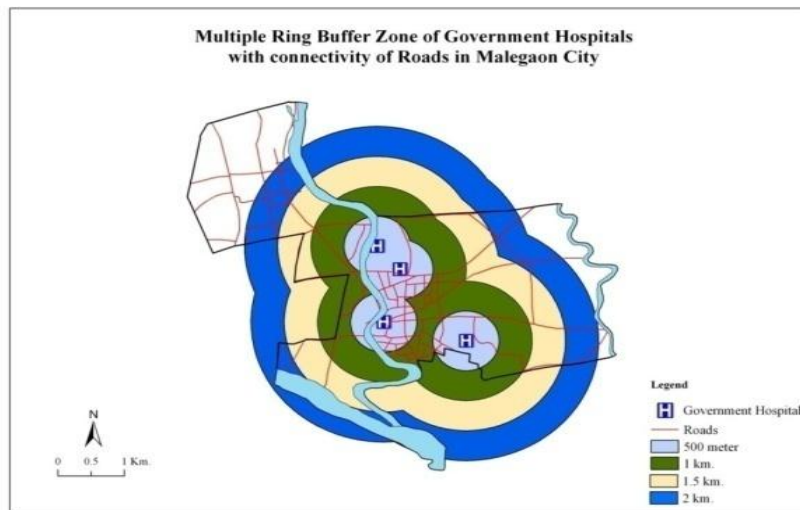
- [1]. Obermeyer, C.M. & Potter, J.E. (1991). Maternal health care utilization patterns in Jordan: a study of patterns and determinants. *Studies in Family Planning*, 22 (3): 177-187.
- [2]. Elo, I.T. (1992). Utilization of maternal health-care services in Peru: the role of women's education. *Health Transition Review* 2(1), 49-69.
- [3]. Becker, S., David, H.P., Ronald, H.G., Connie, G., & Robert, E.B. (1993): The determinants of use of maternal and child health services in Metro Cebu, the Philippines. *Health Transition Review* 3(1), 77-89.
- [4]. Goldman, Noreen and Anne R. Pebley. (1994). Health cards, maternal reports, and the measurement of immunization coverage: the example of Guatemala. *Social Science and Medicine*. Vol. 38, No. 8, pp. 1075-1089.
- [5]. Jagdish C. Bhatia and John Cleland (1995), "Determinants of maternal care in a region of South India" *Health Transition Review* 5, 1995, pp. 127 - 142.
- [6]. Raghupathy, S. (1996). Education and the use of maternal health care in Thailand. *Social Science and Medicine* 43(4), 459-471.
- [7]. Govindasamy, P., & Ramesh, B.M. (1997). Maternal education and utilization of maternal and child health services in India. NFHS Survey Subject Reports No. 5. Mumbai: International Institute for Population Sciences.
- [8]. Dharmalingam, A., Hussain, T.M., & Smith, J.F. (1999). Women's Education, Autonomy and Utilization of Reproductive Health Services in Bangladesh, In A.I.Mundigo (Ed.), *Reproductive Health: Programme and Policy Changes Post-Cairo*. Liege, Belgium: International Union for the Scientific Study of Population (IUSSP).
- [9]. Magadi, Madise & Rodrigues (2000), "Frequency and timing of antenatal care in Kenya: explaining the variations between women of different communities." *Social Science and Medical*. 2000 Aug; 51(4):551-61.
- [10]. Lavado, Rouselle F. & Lagrada, Leizel P., (2008). "Are Maternal and Child Care Programs Reaching the Poorest Regions in the Philippines?," *Discussion Papers DP 2008-30*, Philippine Institute for Development Studies.
- [11]. Rebecca J. S. and Michele L. D. (1997), "Guidelines for the Use of Iron Supplements to Prevent and Treat Iron Deficiency Anemia" International Nutritional Anemia Consultative Group (INACG).
- [12]. Metgud C. S., Katti S. M., Mallapur M. D. and Wantamutte A. S. (2009), "Utilization Patterns of Antenatal Services Among Pregnant Women: A Longitudinal Study in Rural Area of North Karnataka", *Al-Ameen Journal of Medical Science* 2 00 9, Volume 2, No. 1, pp. 58-62.
- [13]. Nair et. al. (2010), "Improving Newborn Survival in Low-Income Countries: Community-Based Approaches and Lessons from South Asia", *Journal of PLoS Med*, April 2010, Volume 7, No. 4.
- [14]. Hyam Bashour and Asmaa Abdul salam (2005), "Syrian Women's Preferences for Birth Attendant and Birth Place", *Journal of Birth*, March 2005, Volume 32, Issue-1, pp. 20-26.

Figure, 1: Location of Government Hospitals and Private Nursing Homes in



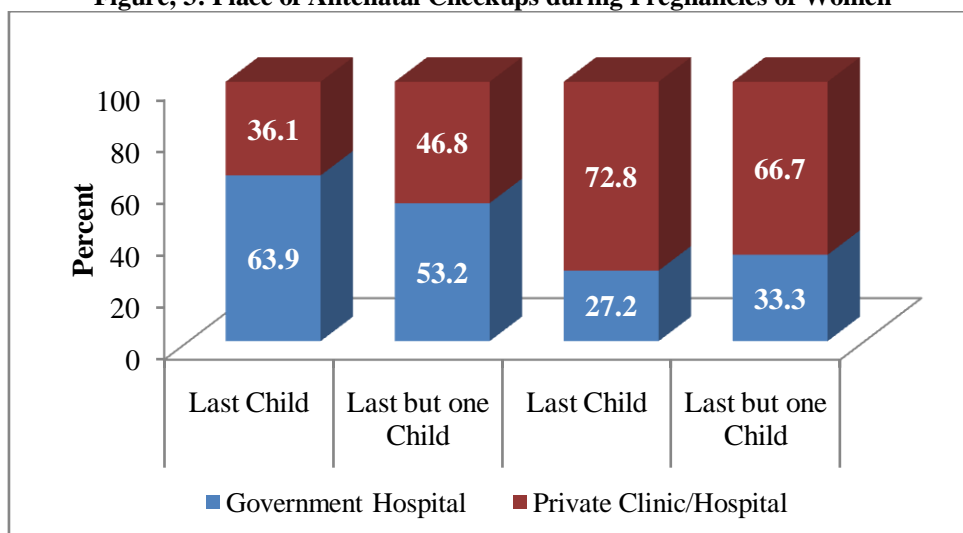
Source: GPS Survey conducted in 2011

Figure 2: Multiple Ring Buffer Zones of Government Hospitals with Connectivity of Roads in Malegaon City

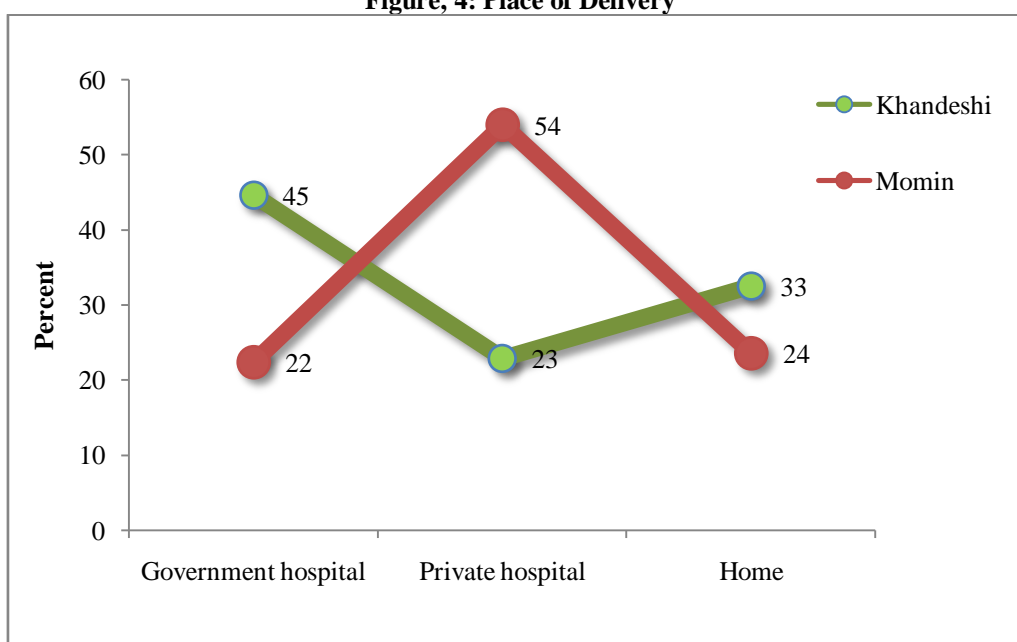


Source: GPS Survey conducted in 2011.

Figure, 3: Place of Antenatal Checkups during Pregnancies of Women



Figure, 4: Place of Delivery



Source: Field survey conducted during 2008-2009, Malegaon

Table.1: Antenatal Care for Women during Last Two Pregnancies

ANC Checkups	Khandeshi		Momin	
	Last Child	Last but one Child	Last Child	Last but one Child
ANC				
Yes	93.6	79.3	89.6	81.8
No	6.4	20.6	10.4	18.2
Total	100	100	100	100
ANC Visits				
	N=233	N=77	N=224	N=19
1-2 Visits	25.3	32.5	13.8	15.8
3 and more Visits	59.2	46.8	65.2	73.7
Don't remember	15.5	20.8	21	10.5
Place of ANC Received				
Government Hospital	63.9	53.2	27.2	33.3
Private Clinic/Hospital	36.1	46.8	72.8	66.7
Anganwadi	0	0	0	0
Health Worker	0	0	0	0
Who did Checkups				
Doctor	86.3	84.4	89.3	100

Nurse/ANM	13.7	15.6	10.7	0
Health Checkups during Pregnancy				
Weight Measured	82.0	83.5	75.9	73.7
Blood Pressure Checked	79.8	81	75.4	63.2
Blood test	68.7	64.6	75.0	63.2
Urine Test	60.5	54.4	65.2	63.2
Sonography	24	16.7	38.8	26.3
HIV Test	1.7	0	4.9	0

Source: Field survey conducted during 2008-2009, Malegaon

Table.2: Odds Ratio of Antenatal Care Services among Muslims

Socio-Economic and Demographic Characteristics	Khandeshi Women		Momin Women	
	Odds Ratio	Chi-Square	Odds Ratio	Chi-Square
Age of the Women (rc=35 Years)				
15-24	23.88	df=1 73.797 P<0.01	3.18	df=1 95.27 (P<0.01)
25-34	1.52**		9.4	
Age of the Last Child (rc=>2 Years)				
<1 Year	7.02	df=1 82.25 (P<0.01)	0***	df=1 92.97 (P<0.01)
1-2 Years	3.98		0	
Number of Children (rc=>4 Children)				
1-2 Children	85.20	df=1 74.49 (P<0.01)	12.0	df=1 90.45 (P<0.01)
2-4 Children	61.7**		4.2	
Educational Attainment of Women (rc=Graduate and More)				
Primary	0.00	df=1 79.20 (P<0.01)	00***	df=1 95.80 (P<0.01)
Secondary and Higher Secondary	0.00		00	
Years of Women Married (10 Years and More)				
1-3 Years	6.43**	df=1 79.40 (P<0.01)	59.7	df=1 92.69 (P<0.01)
4-6 Years	1.23**		64.5	
7-9 Years	3.15		24.4	
Standard of Living (rc=Middle class)				
Poorer	2.48**	df=1 74.05 (P<0.01)	17.21***	df=1 102.73 (P<0.01)
Poor	11.83		11.7***	
Female Health Workers Visited (rc=No)				
Yes	39.40**	df=1 25.35 P=<0.01	11.90**	df=1 31.8 P=<0.01
Type of Health Facility Visited (rc=Anganwadi)				
Government Hospital	7.82	df=1 22.87 P=<0.01	0.0	df=1 28.4 P=<0.01
Private Hospital	16.5		2.60	

Source: Field survey conducted during 2008-2009, Malegaon
rc=Reference Category df=Degree of freedom

Table 3: Place of Delivery and delivery assisted by Professionals

Delivery Assisted	Khandeshi				Momin			
	Govt. hospital	Private Hospital	Home	Total	Govt. hospital	Private hospital	Home	Total
	%	%	%	%	%	%	%	%
Doctors	58.6	69.6	3.6	42.6	73.2	93.3	1.7	67.2
ANM/Midwife	27.9	5.4	3.7	14.9	21.4	2.2	1.7	6.4
Trained Birth Attendants	12.6	25.0	9.8	14.5	3.6	4.4	8.5	5.2
Untrained Birth Attendants (Dai)	0.9	0.0	81.7	27.3	1.8	0.0	83.1	20.0
Relative/friends	0.0	0.0	2.4	0.8	0.0	0.0	5.1	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Chi-Square	df=8 Sign=0.000 Value=240.650				df=8 Sign=0.000 Value=247.304			

Source: Field survey conducted during 2008-2009, Malegaon

Table. 4: Odds Ratio of Institutional Deliveries

Socio-Economic and Demographic Characteristics	Khandeshi		Momin	
	Odds Ratio	Chi-Square	Odds Ratio	Chi-Square
Age of the Women (rc=35 Years)				
15-24	10.56	df=1 19.96	4.83	df=1 99.66
25-34	4.02	(P<0.01)	4.89	(P<0.01)
Number of Children (rc=>4 Children)				
1-2 Children	9.90	df=1 19.76	15.87*	df=1 98.96
2-4 Children	4.12	(P<0.01)	2.25	(P<0.01)
Educational Attainment of Women (rc=Graduate and More)				
Primary	5.13***	df=1 19.77	1.29	df=1 98.12
Secondary and Higher Secondary	7.61	(P<0.01)	3.25	(P<0.01)
Years of Women Married (10 Years and More)				
1-3 Years	4.74	df=1	3.08	df=1
4-6 Years	2.15	20.66	2.42	97.22
7-9 Years	1.95	(P<0.01)	2.11	(P<0.01)
Standard of Living (rc=Middle class)				
Poor	0.75***	df=1 20.87	8.14**	df=1 99.56
Poorer	0.51**	(P<0.01)	3.18*	(P<0.01)

Source: Field survey conducted during 2008-2009, Malegaon
rc=Reference Category df= Degree of Freedom

Table.5: Breastfeeding of the Child among Muslim Women

Breastfeeding	Khandeshi		Momin	
	No.	%	No.	%
Immediately after the birth	62	24.9	39	15.6
After 2 hours of birth	32	12.8	67	26.8
1-3 days	127	51.0	133	53.2
After 3 days	23	9.2	9	3.6
Never	5	2.0	2	0.8
Total	249	100.0	250	100.0
First milk squeezed out				
Yes	170	68.3	92	36.8
No	79	31.7	158	63.2
Total	249	100.0	250	100.0

Source: Field survey conducted during 2008-2009, Malegaon