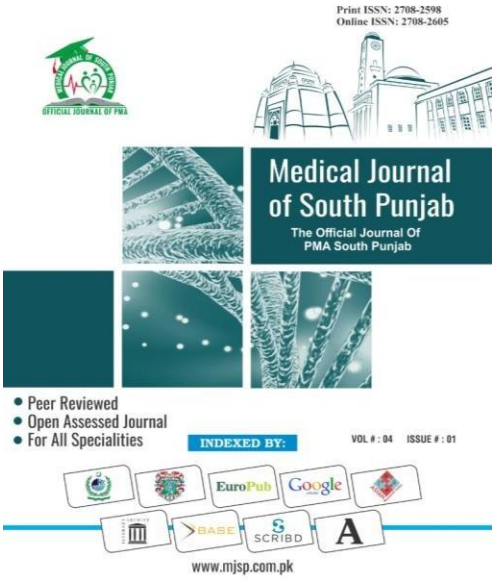
ISSN (E): 2708-2601
ISSN (P): 2708-2598

Medical Journal of South Punjab
Article DOI: 10.61581/MJSP.VOL04/01/05
Volume 4, Issue 1, 2023



Trend and Reasons of Women Towards the Choice for Place of Delivery: Evidence from mics 2017-18 Punjab, Pakistan

Publication History

Received: Feb 01, 2023 Revised: March 10, 2023
Published: Jun 01, 2023 Accepted: April 13, 2023

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Conflict of Interest:

Author(s) declared no conflict of interest.

Acknowledgment:

No Funding received.

Citation: Zeeshan M, Shahzad I, Hayat S. Trend and reasons of women towards the choice for place of delivery: evidence from mics 2017-18 Punjab, Pakistan. Medical Journal of South Punjab. 2023 June 3; 4(1):44-50.

Please scan me to access online.

An official publication of
Medteach Private Limited, Multan, Pakistan.
Email: farman@mjsp.com.pk, Website: https://mjsp.com.pk/index.php/mjsp

Medical Journal of South Punjab
Volume 4, Issue 1, 2023; pp: 44-50
Original Article

Trend and Reasons of Women Towards the Choice for Place Of Delivery: Evidence from Mics 2017-18 Punjab, Pakistan

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ABSTRACT

Objective: *The present study aimed to To assess the trend and reasons of women towards the choice for place of delivery based on (MICS) 2017-18, Punjab, Pakistan.*

Methods: *This observational study was conducted at 36 districts of Punjab, Pakistan from 2017-18. A total of 53,840 households were drawn as the sample size from 2,692 sample clusters, out of which 1,893 were rural clusters and 799 were urban clusters. From 53,840 households, 52,765 households occupied and 51,660 were successfully interviewed. Further, 79,510 women were eligible for interview age group 15-49 years, 74,010 women were interview successfully. There were 26,980 women who had ever or currently married, and 15,656 women gave birth in the last two years. The outcome variable was place of delivery and exposure variables were socio-demographic and socioeconomic characteristics. Chi-square test was applied to identify the association by using SPSS. P-value≤0.05 was considered as significant.*

Results: *There were (43.5%) private sector deliveries, (29.7%) public sector hospitals, and (26.4%) home deliveries. Urban women more likely to choose public sector hospitals for delivery OR=1.02 (0.94-1.09) 95% CI, p<0.010. The women of South and Central Punjab are more likely to choose private sector hospitals for delivery, OR=1/0.535=1.87 (0.478-0.600)95% CI, p<0.010.*

Conclusion: *Overall women prefer delivery process in private sector particularly urban women. It may be the facilities present in private sector hospitals in urban areas or healthcare facilities are not accessible especially in rural areas. In modern era, some women still prefer home delivery.*

Keywords: Attitudes, Reasons, Women, Choice, Place of Delivery, Rural, Urban

1. INTRODUCTION

The maternal mortality rate (MMR) in Pakistan is 276 deaths per 100,000 live births[1]. Pakistan is the fifth-largest contributor to maternal mortality, and six per cent of the world's maternal deaths occur in Pakistan[2]. Only in 2013, around 289,000 women died due to pregnancy-related complications in Pakistan. In view of the risk factors involved in maternal mortality, an international effort has focused on increasing the share of births at the proper health facilities (institutional deliveries) or the births attended by skilled birth attendants[3].

About 50 per cent of births in Pakistan take place at home, mainly with the help of untrained birth attendants[4]. The major reason for the home deliveries in Pakistan is found to be the limited role of women in decision-making at the household level, as well as their lower educational status and smaller control over the resources[5]. Some other determinants of the choice of place of delivery are distance to the health care facility, transportation facility, cost of institutional delivery, trust in health attendants and exposure to mass media[6-8].

It is also found that women's preference for home deliveries is also shaped by their past experience of the poor health system, which includes poor availability of drugs, incompetent health workers, and lack of privacy and rude attitudes of health attendants[9]. Furthermore, a study in Pakistan found that mothers' and fathers' education has a significant impact on the decision about the place of delivery[6]. The current study is based on the data collected via (MICS) 2017-18, which was designed for all 36 districts of Punjab, including rural and urban areas, to estimate a large number of indicators about children and women of Punjab.

2. METHODOLOGY

To estimate children and women health indicators, the MICS 2017-18 was designed for 36 districts of the Punjab, rural and urban. Two-stage stratified cluster sampling was adopted. District's rural and urban areas were the first strata, and the households were the second stage.

A total of 53,840 households were drawn as the sample size from 2,692 sample clusters, out of which 1,893 were rural clusters and 799 were urban clusters. From 53,840 households, 52,765 households occupied and 51,660 were successfully interviewed. Further, 79,510 women were eligible for interview age group 15-49 years, 74,010 women were interview successfully. There were 26,980 women who had ever or currently married and 15,656 women gave birth in the last two years. The outcome variable was place of delivery and exposure variables were socio-demographic and socioeconomic characteristics. Chi-square test was applied to identify the association by using SPSS. P-value$\leq$0.05 was considered as significant.

3. RESULTS

Table I represents the socio-demographic

Table I: Socio-demographic and socioeconomic characteristics of the women who gave live birth in the last two years with respect to the place of delivery

Variable		Place of delivery				Total 15,656
		Public 4,653 (29.7%)	Private 6,816 (43.5%)	Home 4,134 (26.4%)	Other 53 (0.3%)	
Area	Urban	1,644 (31.3%)	2,653 (50.5%)	930 (17.7%)	30 (0.6%)	5,257
	Rural	3,009 (28.9%)	4,163 (40.0%)	3,204 (30.8%)	23 (0.2%)	10,399
Region of the Punjab	South	1,210 (23.5%)	1,951 (37.8%)	1,983 (38.4%)	14 (0.3%)	5,158
	Central	2,382 (30.3%)	3,806 (48.4%)	1,649 (21.0%)	24 (0.3%)	7,861
	Northern	1,061 (40.3%)	1,059 (40.2%)	501 (19.0%)	15 (0.6%)	2,636
Mother's age (years) at 1st marriage	<15	187 (23.9%)	240 (30.7%)	352 (45.0%)	3 (0.4%)	782
	15-20	2,182 (29.9%)	2,838 (38.9%)	2,247 (30.8%)	23 (0.3%)	7,290
	21-25	1,653 (30.2%)	2,623 (47.9%)	1,182 (21.6%)	15 (0.3%)	5,473
	26-30	531 (30.2%)	928 (52.8%)	290 (16.5%)	9 (0.5%)	1,758
	>30	100 (28.4%)	188 (53.4%)	62 (17.6%)	2 (0.6%)	352
Ever attend the school	Yes	3,085 (32.3%)	4,901 (51.4%)	1,522 (16.0%)	34 (0.4%)	9,542
	No	1,569 (25.7%)	1,915 (31.3%)	2,611 (42.7%)	19 (0.3%)	6,114
Education	None/preschool	1,650 (25.9%)	2,005 (31.5%)	2,690 (42.3%)	20 (0.3%)	6,365
	Primary	1,024 (32.8%)	1,303 (41.7%)	793 (25.4%)	6 (0.2%)	3,126
	Middle	585 (35.2%)	788 (47.4%)	280 (16.8%)	9 (0.5%)	1,662
	Secondary	739 (32.9%)	1,250 (55.6%)	251 (11.2%)	8 (0.4%)	2,248
	Higher	655 (29.1%)	1,469 (65.2%)	119 (5.3%)	10 (0.4%)	2,253
Wealth	Poorest	850	849	1,725	10 (0.3%)	3,434

index quintile		(24.8%)	(24.7%)	(50.2%)		
	Second	915 (29.4%)	1,139 (36.6%)	1,055 (33.9%)	2 (0.1%)	3,111
	Middle	1,011 (31.8%)	1,458 (45.8%)	702 (22.1%)	11 (0.3%)	3,138
	Fourth	1,045 (33.9%)	1,554 (50.5%)	469 (15.2%)	12 (0.4%)	3,080
	Richest	833 (29.2%)	1,816 (63.7%)	183 (6.4%)	18 (0.6%)	2,850
Antenatal care	Yes	4,272 (30.8%)	6,498 (46.8%)	3,084 (22.2%)	33 (0.2%)	13,887
	No	381 (21.5%)	318 (18.0%)	1,050 (59.4%)	20 (1.1%)	1,769
Number of antenatal care visits	None	381 (21.5%)	318 (18.0%)	1,050 (59.4%)	20 (1.1%)	1,769
	1-3	1,624 (29.5%)	1,856 (33.7%)	2,014 (36.6%)	11 (0.2%)	5,505
	4+ visits	2,624 (31.7%)	4,585 (55.3%)	1,056 (12.7%)	22 (0.3%)	8,287
	Missing /DK	24 (25.3%)	57 (60.0%)	14 (14.7%)	0 (0.0%)	95

Source: Author's Own Calculation

and socioeconomic factors of the 15,656 women who gave live births in the last two years with respect to the place of delivery. There were (43.5%) private sector deliveries, (29.7%) public sector hospitals, and (26.4%) home deliveries.There were (50.5%) of urban women delivered babies in the private sector. In south Punjab, (38.4%) women choose home delivery, while, in central and Northern Punjab, the private sector deliveries were(48.4%) and (40.2%), respectively. The age of marriage, school education, wealth index quintile and antenatal care set the trend of women toward the private sector for deliveries. (Table I).

In Table II, Place of delivery was positively associated with area of residence, regions of Punjab, education status of the mothers,age at first marriage, socio-economic status and antenatal care visits. (Table II).

4. DISCUSSION

The Study shows the strong association of place of delivery with socio-demographic and socio-economic characteristics. These factors put substantial impact on the changing of place of delivery in the Punjab. Thesefindings are similar wit findings of Wagle et al[10] and Bolam et al.[11]. Much parallel findings were observed in previous studies where authors found thatagrarian are 1.5 times more chances to give birth in

home as compare public sector health facilities

Table II: The hypothesis and testing

Sr. #	Hypothesis	Chi-square value	D.F	P-value	Result
1.	There is no association between the area of residence of mother and the place of delivery	333.95	3	0.000	Associated
2.	There is no association between the regions of the Punjab and the place of delivery	686.45	6	0.000	Associated
3.	There is no association between the mother's age at first marriage and place of delivery	424.61	12	0.000	Associated
4.	There is no association between the education of women and the place of delivery	1851.68	12	0.000	Associated
5.	There is no association between the wealth index of women and place of delivery	2088.51	12	0.000	Associated
6.	There is no association between the number of antenatal care visits and the place of delivery	2280.78	9	0.000	Associated

than the mother who are not working[12]. Talking about the women empowerment, the pregnancy-related issues with their husbands, significantlyimpacts to choice the place for delivery. The women who discusse with her husbands are 0.34 times low chances to give birth the baby in home than their counterparts having notliberty to expose this matter with her husbands[10].

These results concur with Shah et al[13] and Tabatabaie et al[14] Moreover, those womenwho do not pay heed about the place of delivery with their husbands are more likely to deliver babies at home[12, 15, 16]. Control variable, including the age of mothers, is the leading factor for the choice of the place of delivery. Further, the mothers who has age group (15 - 24 years) are prone to give birth the baby at home than the older mothers[17]. It was found that the region, place of residence and living status of women also led impact on the place of delivery. The education status of the mother has positive impact on

the choice for place of delivery, as reported previously (p<0.010; OR 0.683; 95%; CI 0.580-0.804)[18]. The women whose education status have middle or above are atmost 0.3 times low chances to deliver the baby in home as as compared to un-educated women (p<0.010; OR 0.334; 95%; CI0.267-0.419) [18]. Father education status is also a leading factor to choice the place for delivery of their wives. The educated fathers have 0.91 less chances to choose home for givingbirths than un-educated fathers, (p<0.010; OR 0.757; 95%; CI 0.636-0.901)[18]. (This is repetitive discussion: agrarian mothers information has already discussed).

The living status of mothers led a great impact on the choice to deliver their babies.It was found the mothers belongs to the high socio-economic status have low chances to give birth their babies at home as compare the the low socio-economic

status mothers as 2.63 times (p≤0.000;OR 2.634; 95%; CI 2.181-3.182)a woman have more chances to give birth her baby in home as compare to the public health sector, however it is pertinent to mention that same results were shown by Bustreo et al.[17].

In the Punjab, the health facalities are very costly which may casue to deliver baby at home.Ourfindings revealed that there is a negative impact on the empowerment of women in home birhs. This findings supported of Hussain et al[18]. As traditional trend ,shows rural-women are higher chances to give birth in home as compare to the urban women.

5. CONCLUSION

The women prefer delivery process in private sector particularly urban women. It may be the facilities present in private sector hospitals in urban areas or healthcare facilities are not accessible especially in rural areas. In modern era, some women still prefer home delivery. Finally, the maternal care and child-care awareness campaigns should be began to improve the knowledge about delivery and child health, free of cost.

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