

Original Article

## Study On Delivery Practices And Reasons Associated With These Practices Among Mothers

Jaskirat Kaur<sup>1</sup>, Hardeep Kaur Mal<sup>2</sup>, Shalini Devgan<sup>3</sup>

<sup>1</sup>Lecturer, Department Of Community Health Nursing, Malwa College Of Nursing Kotkapura, Faridkot, Punjab, India; <sup>2</sup>Associate Professor, Department of Community Health Nursing, UCON, Faridkot Punjab, India; <sup>3</sup>Assistant Professor, Department of Community Medicine, GGS Medical College, Faridkot Punjab, India.

### Abstract

**Background:** The provision of care for women during pregnancy and childbirth is essential to ensure a healthy and successful outcome of pregnancy for the mother and her newborn. The present study was conducted with objective of assessing delivery practices and reasons associated with these practices among all the mothers who delivered within one year from 1<sup>st</sup> December 2013 to 1<sup>st</sup> December 2014, residing in selected rural and urban areas of district Faridkot, Punjab. **Methodology:** Purposive sampling technique was used. Semi structured interview schedule was used to collect information. **Result:** The data revealed that out of 120 deliveries in rural area, 5 mothers underwent home delivery and 115 mothers underwent institutional deliveries whereas in urban area, out of total 70 deliveries, 7 were conducted at home and 63 were institutional delivery. Majority of the home deliveries in rural area 03(60%) as well as in urban area 05 (71.42%) were conducted by untrained dais. The majority of home delivered rural mothers 4(80%) revealed financial limitation and fear of caesarian section were their major reason for home delivery whereas majority of home delivered urban mothers 06(85%) revealed financial limitation were their major reason for home delivery. **Conclusion:** The present study shows that as the awareness regarding institutional delivery increases the number of institutional deliveries also increases both in urban and rural areas as compared to home deliveries. Financial limitations and fear associated with c-section remains the most common reasons for home deliveries.

**Keywords:** Delivery practices; Mothers; Rural and Urban area; Punjab

Corresponding author: Jaskirat Kaur, Lecturer, Department Of Community Health Nursing Malwa College Of Nursing Kotkapura, Faridkot, Punjab, India

This article may be cited as: Kaur J, Mal KH., Devgan S Study On Delivery Practices And Reasons Associated With These Practices Among Mothers. Int J Com Health and Med Res 2015;1(1):2-8

Article Received: 2-11-15

Accepted On: 5-12-2015

### INTRODUCTION

Pregnancy is a physiological process but is also associated with period of potential risk due to complications during labor, delivery, and postnatal period. The provision of care for women during pregnancy and childbirth is essential to ensure a healthy and successful outcome of pregnancy for the mother

and her newborn.<sup>1</sup> The World Health Organization (WHO) estimates that every day, approximately 800 women die from preventable causes related to pregnancy and childbirth. 99% of all maternal deaths occur in developing countries. Maternal mortality is higher in women living in rural areas and among poorer communities. Skilled care

before, during and after childbirth can save the lives of women and newborn babies. In 2013, 289 000 women died during and following pregnancy and childbirth. Almost all of these deaths occurred in low-resource settings, and most could have been prevented. The maternal mortality ratio in developing countries in 2013 is 230 per 100 000 live births versus 16 per 100 000 live births in developed countries.<sup>2</sup> It was also reported that only 53 per cent of the pregnant women in developing countries have the assistance of skilled health personnel (a midwife or doctor) and only 40 per cent give birth in a hospital or health centre.<sup>3</sup> As the highest incidence of maternal and perinatal mortality occurs around the time of birth with the majority of deaths occurring within the first 24 hours after birth which accounts for WHO to advocate for skilled care at every birth. Ensuring quality maternity care services can save the lives of women and newborns. These services require an accredited health professional – such as a midwife, doctor or nurse – who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns.<sup>4</sup>

## MATERIAL AND METHODS

The study was conducted at rural area (village Bajakhana) and urban area (Balwinder Nagar and Bazigar Basti) of district Faridkot, Punjab from 15 December 2013 to 15th January, 2014. The total sample size comprised of 190 (120 in rural and 70 in urban area) women and who have delivered within one year from 1<sup>st</sup> December 2013 to 1<sup>st</sup> December 2014 of selected urban and rural areas of district Faridkot, Punjab. Ethical clearance was obtained from ethical committee of the institute before commencement of the study. Written informed consent was obtained from the patients prior to the data collection procedure. Semi structured interview schedule to assess Socio-Demographic data (11 parameters which included demographic information of study subjects such as age, education, occupation, caste, religion, type of family, family income, place of residence, distance from health facility, number of antenatal checkups and place of delivery of previous child), delivery practices (home or institutional) and reasons associated with these practices among mothers

residing in selected rural and urban areas of district Faridkot, Punjab. Analysis of the data was done in accordance with the objectives. It was done by using the descriptive and inferential statistics i.e. by calculating frequency, percentage distribution and chi square test. P-value of <0.05 was considered as significant value. The subjects were explained about purpose of gathering information and were assured that their responses would be kept confidential and used only for research purpose.

## RESULTS

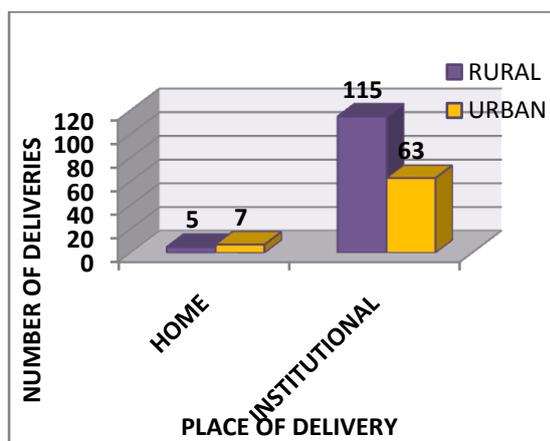
The demographic profile of 190 mothers (120 in rural and 70 in urban area) showed that most of the pregnant women were in the age group 20-30 years both in rural 110 (91.7%) as well as in urban 64 (91.4%). Most of the pregnant women in rural area 31 (25.8%) as well as in urban area 28 (40.0%) were educated up to primary level followed by secondary level i.e. 23 (19.2%) rural and 21 (30.0%) urban, while 45 (37.5%) rural and 15 (21.4) urban mothers were illiterate. Majority i.e. 97 (80.8%) rural and 60 (85.7%) urban mothers were housewives while 6 (5.0%) rural and 03 (4.3%) urban, 3 (2.5%) rural and 02 (2.9%) urban, 14 (11.7%) rural and 05 (7.1%) urban mothers were engaged in business, service and other occupations respectively. Majority of women 83 (69.2%) rural and 46 (65.7%) urban belong to reserved category while as per religion most of the 88 (73.3%) rural and 57 (81.4%) urban mothers were Sikh. Classification of mothers on the basis of type of family indicates 80 (66.7%) rural and 25 (35.7%) urban mothers were from nuclear families and 40 (33.3%) rural and 45 (64.3%) urban mothers were from joint families. As per monthly family income, most of the women, 56 (46.7) rural and 26 (37.1) urban belonged to income group Rs. 5000-10,000 followed by 45 (37.5) rural and 31 (44.3) urban belonged to income group of less than Rs. 5000. As per antenatal checkup only 2 (1.7%) mothers from rural area had no antenatal checkup. As per place of delivery of previous child, 34 (10.8%) rural and 17 (8.6%) urban mothers delivered their last child at home while 45 (87.5%) rural and 35 (91.4%) urban mothers delivered their last child at institution (table 1). Out of 120 deliveries in rural area, 5 (4.2%) were conducted at home and 115 (95.8 %) were institutional whereas in urban area, out of total 70 deliveries, 7 (10.0%) were conducted at home and 63 (90.0%) were institutional (graph 1). Majority of the home deliveries in rural area 03 (60%) as well as in urban area 5 (71.42%) were conducted by untrained dais.

Rest of the home deliveries were conducted by private nurse or doctor (graph 2). The major reason for opting to deliver at home for rural 04(80%) and urban mothers 6(85%) was financial, whereas 4(80%) rural and 5(71.4%) urban mothers preferred to deliver at home due to fear of caesarian section, 3(60%) rural and 4(57.1%) urban mothers reported lack of escort at home, 03(60%) rural and 04(57.1%) urban mothers reported ignorance, 02(40%) rural and 03(42.8%) urban mothers reported unexpected preterm labour, 01(20%) rural and 03(60%) urban mothers

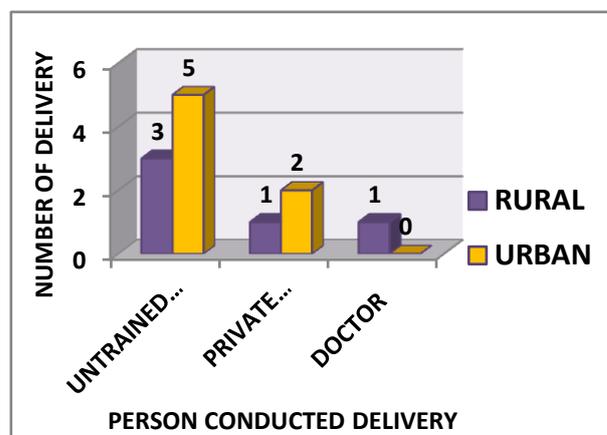
**Table 1: Socio-demographic profile of the sample****N-190**

Sample Characteristic		Rural Area n(%)	Urban Area n(%)
Age (in years)	< 20	07 (5.8)	04 (5.7)
	20-30	110 (91.7)	64 (91.4)
	31-40	03 (2.5)	02 (2.9)
	>40	0	0
Education of the Mother	Illiterate	45 (37.5)	15 (21.4)
	Upto Primary	31 (25.8)	28 (40.0)
	Upto Secondary	23 (19.2)	21 (30.0)
	Upto Higher secondary	13 (10.8)	03 (4.3)
	Graduates and above	08 (6.7)	03 (4.3)
Occupation of the Mother	Housewife	97 (80.8)	60 (85.7)
	Business	06 (5.0)	03 (4.3)
	Service	03 (2.5)	02 (2.9)
	Others	14 (11.7)	05 (7.1)
Caste	General	37 (30.8)	24 (34.3)
	Reserved	83 (69.2)	46 (65.7)
Religion	Hindu	32 (26.7)	13 (18.6)
	Sikh	88 (73.3)	57 (81.4)
	Muslim	0	0
	Christian	0	0
Family income (Rs./month)	<5000	45 (37.5)	31 (44.3)
	5000-10,000	56 (46.7)	26 (37.1)
	10,001-20,000	10 (8.3)	07 (10.0)
	>20,000	09 (7.5)	06 (8.6)
Distance from health facility (Km)	<5	120 (100)	70 (100)
	5-10	0	0
	>10	0	0
Antenatal checkups	Nil	02 (1.7)	0
	<4	63 (52.5)	21 (30.0)
	4	30 (25.0)	41 (58.6)
	>4	25 (20.8)	08 (11.4)
Place of delivery of previous child	Home	34 (10.8)	17 (8.6)
	Institution	45 (87.5)	35 (91.4)

**Graph 1: Percentage distribution of delivery practices of mothers in rural & urban areas of district Faridkot.**



**Graph 2: Distribution of mothers according to the person who conducted the home delivery in rural & urban areas of district Faridkot.**



**Table 2: Reasons reported for opting to deliver at home in rural and urban areas of district Faridkot.**

N=12

Reasons	Rural(N=05) n(%)	Urban (N=07)n(%)
Financial limitation	04(80)	06(85)
Long distance to hospital	02(40)	01(14.3)
Lack of escort at home	03(60)	04(57.1)
Transport limitation	01(20)	0
Risk of caesarian section	04(80)	05(71.4)
Traditional attitude	02(40)	01(14.3)
Previous home delivery	01(20)	01(14.3)
Unexpected preterm labour	02(40)	03(42.8)
Short labour	01(60)	03(42.8)
Ignorance	03(60)	04(57.1)
Convenient and comfortable	01(20)	01(14.3)
Dissatisfied health care practices at health facilities	02(40)	00
The wish to have family members nearby and the need for women to be close to their other children and the housework	01(20)	02(28.6)

**Table3:Percentage distribution of reasons for opting to deliver at institution in rural and urban areas of district Faridkot.**

N=178

Reasons for institutional deliveries	Rural (N=63) n(%)	Urban (N=115) n(%)
Unsuccessful home delivery	04(6.3)	02(1.7)
Safe for mother	45(71.4)	28(24.34)
Safe for child	57(90.4)	34(29.5)
Predecided	49(77.7)	56(48.69)
Advised due to complications	17(26.9)	41(15.65)
Advised during ANC	47(74.6)	82(71.3)
ASHA motivated	34(53.9)	00
JSY incentive	38(60.3)	65(56.5)

delivery (table 2). Majority of the rural mothers 57(90.4%) reported safety and care of newborn to be their reason for institutional delivery. 49(77.7%) were predecided, 47(74.6%) were advised during Ante natal checkup (ANC), 45(71.4%) preferred for safety of mother, 38(60.3%) reported for Janani Suraksha Yojana (JSY) incentive, 34(53.9%) were ASHA motivated, 17(26.9%) were advised due to complications, 04(6.3%) reported unsuccessful home delivery to be their reason for institutional delivery. While in urban area majority of mothers 82 (71.3%) were advised during ANC which was their reason for institutional delivery, 65(56.5%) mothers reported JSY incentive, 56(48.69%) reported that it was predecided, 41(15.65%) were advised due to complications, 34(29.5%) reported safety of child, 28(24.34%) mother safety and 2(1.7%) told unsuccessful home delivery to be their reason for institutional delivery (table 3). Table 4 shows significant association between delivery practices in rural area and family income with  $p=0.034$  as well as number of antenatal checkups with  $p=0.000$  while in urban areas the significant association were found between delivery practices and education of women with  $p=0.015$ , income of family with  $p=0.020$  and caste with  $p=0.044$ .

## DISCUSSION

In present study it was revealed that 10% of the deliveries in urban areas of district

Faridkot were conducted at home. This finding was in contrast with Abeje G et al<sup>5</sup> which reported that only 21.2% deliveries were conducted at home and rest 78.8% were at health institution. On the contrary, Garg et al<sup>3</sup> reported that about two-thirds of the deliveries were conducted at home. The variation could be due to cultural, racial, education, financial difference and lack of awareness. The present study found that financial limitation, long distance to hospital, lack of escort at home, transport limitation, fear of caesarean section, traditional attitude, previous home delivery, unexpected preterm labour, short labour, ignorance, convenient and comfortable, dissatisfied health care practices at health facilities, the wish to have family members nearby and the need for women to be close to their other children and the housework were the major reasons to deliver at home. The reasons were consistent with study conducted by C Wilunda (2014)<sup>6</sup> which revealed that barriers to utilization of institutional delivery services were insecurity, poverty, socio-cultural factors, long distances to health facilities, lack of supplies, drugs and basic infrastructure at health facilities, poor quality of care at health facilities. Similarly Shiferaw S et al (2013)<sup>7</sup> also reported that the most important reasons for not seeking institutional delivery were the belief that it is not necessary, not customary, high cost, distance or lack of transportation. The present study revealed significant association between number of

**Table 4: Relationship of institutional delivery practices with socio-demographic variables of mothers of rural and urban area.**

N=120

Socio-demographic variables		Delivery practice in rural area					Delivery practice in urban area				
		H	I	n	df	Sig	H	I	n	Df	Sig
Age	< 20	0	07	07	2	$\chi^2 = .474$ p = .789	0	04	04	2	$\chi^2 = .729$ p = .694
	20-30	5	105	110			7	57	64		
	31-40	0	03	03			0	02	02		
	>40	0	0	0			0	0	0		
education	Illiterate	4	41	45	4	$\chi^2 = 4.495$ p = .343	5	10	15	4	$\chi^2 = 12.32$ p = .015
	Primary	1	30	31			2	26	28		
	Secondary	0	23	23			0	21	21		
	Higher secondary	0	13	13			0	03	03		
	Graduates or above	0	08	08			0	03	03		
Occupation of mother	House wife	4	93	97	3	$\chi^2 = .702$ p = .873	5	55	60	3	$\chi^2 = 5.74$ p = .125
	Business	0	06	06			0	03	03		
	Service	0	03	03			0	02	02		
	Others	1	13	14			2	03	05		
Caste	General	0	37	37	1	$\chi^2 = 2.326$ p = .127	0	24	24	1	$\chi^2 = 4.05$ p = .044
	Reserved	5	78	83			7	39	46		
Religion	Hindu	1	31	32	1	$\chi^2 = 1.11$ p = .731	1	12	13	1	$\chi^2 = .094$ p = .759
	Sikh	4	84	88			6	51	57		
	Muslim	0	0	0			0	0	0		
	Christian	0	0	0			0	0	0		
Family income per month	<5000	5	40	45	3	$\chi^2 = 8.696$ p = .034	7	24	31	3	$\chi^2 = 9.78$ p = .020
	5000-10,000	0	56	56			0	26	26		
	10,001-20,000	0	10	10			0	07	07		
	>20,000	0	09	09			0	06	06		
Number of antenatal checkups	Nil	2	0	02	3	$\chi^2 = 48.4$ p = .000	0	0	0	2	$\chi^2 = .812$ p = .666
	<4	3	60	63			3	18	21		
	4	0	30	30			3	38	41		
	>4	0	25	25			1	07	08		
Place of delivery of previous child	Home	2	32	34	2	$\chi^2 = 4.29$ p = .117	1	16	17	2	$\chi^2 = 2.96$ p=.228
	Institution	2	43	45			6	29	35		

of antenatal checkup and delivery practice with  $p < .05$ . Similarly, Mehari<sup>8</sup> reported that one or more ANC visits is an important factor for influencing delivery care service utilization. However, on the contrary **Fikre found no** association between ANC attendance and delivery

practices. The present study also found significant association between maternal education and

delivery practice with  $p < .05\%$ . Mehari<sup>8</sup> also found that as the level of maternal education increases, the probability of giving birth at health institutions also raises.

Regardless of the fact that Punjab is one of the most prosperous and educated states in India, home deliveries and unsafe deliveries are still prevalent in rural Punjab and are significantly more less

educated females. This could be attributed to the prevalent psycho-social and cultural beliefs of the less educated women. Health education aspect on the promotion of safe and institutional deliveries is often neglected by the health care delivery system. The introduction of Janani Suraksha Yojana (JSY) under the National Rural Health Mission (NRHM) was launched for increasing institutional deliveries by provision of cash assistance to mothers and Accredited Social Health Activists (ASHAs).

## CONCLUSION

The present study concluded that in this era of medicine, deliveries are still conducted at home. Factors which play significant role in delivery practices of urban areas were education, income and caste while in case of rural areas the major factors were income and total number of antenatal checkups. Focusing on these factors will help both in rural as well as urban areas will decrease the number of home deliveries.

## REFERENCES

1. Tuladhar H, Khanal R, Kayastha S, Shrestha P, Giri A. Complications of home delivery: Our experience at Nepal Medical College Teaching Hospital. *Nepal Medical College Journal* 2009; 11(3):164-169.
2. World Health Organization. Maternal mortality fact sheet pg:348; 2014 available at <http://www.who.int/mediacentre/factsheets/fs348/en/#content>
3. Garg R, Shyamsunder D, Singh T, Singh PA. Study on delivery practices among women in rural Punjab. *Health and Population: Perspectives* 2010; 33 (1): 23-33.
4. Singh A, Mavalankar VD, Bhat R, Desai A, Patel SR, Singh PV, Singh N. *Bull World Health Organization* 2009;87(12): 960-964.
5. Abeje G, Azage M, and Setegn T. Factors associated with Institutional delivery service utilization among mothers in Bahir Dar City administration, Amhara region: a community based cross sectional study. *Reproductive Health* 2014; 11: 22.
6. Wilunda C, Quaglio G, Putoto G, Lochoro P, Oglio G, Manenti F, Atzori A, Miligan R, Takahashi R, Mukundwa A, Oyerinde K. A qualitative study on barriers to utilisation of institutional delivery services in Moroto and Napak districts, Uganda: implications for programming. *BMC Pregnancy and Childbirth* 2014; 4(14): 259.
7. Shiferaw S, Spigt M, Godefrooij M, Melkamu Y, Tekie M. Why do women prefer home births in Ethiopia. *BMC Pregnancy and Childbirth* 2013; 13: 5.
8. Mehari. Levels and Determinants of Use of Institutional Delivery Care Services among Women of Childbearing Age in Ethiopia: Analysis of EDHS 2000 and 2005 Data, demographic and health surveys 2013; 83.

**Source of support:** Nil

**Conflict of interest:** None declared