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Research Article

Assessment of un-booked cases and their mode of delivery presenting at Civil Hospital Quetta

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ABSTRACT

Objective: To assess the un-booked cases and their mode of delivery presenting at Civil Hospital Quetta

Material and methods: This cross sectional study was conducted at Department of Obstetrics & Gynecology Bolan Medical Complex/Civil Hospital Quetta from January 2017 to June 2017. Total 182 obstetric patients were selected for this study. Mode of delivery (vaginal/C-section) and its association with age, parity, educational status was assessed.

Results: Total 182 obstetric patients were included in this study. Mean age of the patients was 25.26 ± 5.38 years. Booked cases were 82 (45%) and un-booked cases were 100 (55%). Total vaginal deliveries were 71 (39%) and caesarean section was performed in 111 (61%) cases. Family income of 97 (53%) cases was Rs. <15000, family income of 57 (31.3%) cases was Rs. 15001 – 30000 and family income of 28 (15.4%) cases was Rs. >30000. Total 101 (55%) cases were primary para and 81 (45%) cases were multipara, 116 (64%) belonged to rural area and 66 (36%) belonged to urban area.

Conclusion: Results of this study reveals that most of the obstetric women were un-booked and C-section rate is very high. Most of the cases belonged to low socio-economic group and literacy rate was very low. Significant association between mode of delivery and education status was noted.

Key words: Antenatal care, Booked, Obstetric complications, Unbooked, parity

INTRODUCTION

Antenatal care is a perfect example of preventive medicine. The aim is to ensure the well-being of mother and child. The basic components of antenatal care have been defined as early and continuous risk management, health promotion, psychosocial intervention and follow-up.[1]

Antenatal care is an important determinant of high maternal mortality rate and one of the basic components of maternal care on which life of mothers and babies depends.[2,3]

Several studies conducted in developing countries on demographic and socio-cultural factors influencing the use of maternal health care services, have shown that factors like maternal age, number of living children, education, place of residence, occupation, religion and ethnicity are significantly associated with the use of antenatal care.[4,2]

The other factors like poor state of health services, widespread ignorance, pervading superstitions,

traditional beliefs and customs and high hospital bills tend to make traditional medicine and faith based practices arguably more popular than orthodox obstetric practice in our communities. Evidence based medicine indicates that most pregnancy related maternal deaths could be averted with access to professional care during pregnancy and delivery care and puerperium, as well as access to emergency obstetric care in the event of complication.[5]

Conversely, various studies have associated lack of proper antenatal care with adverse maternal outcomes.[6] Further, a study done in Nigeria has concluded that no antenatal care, parity, level of education, and mode of delivery were significantly associated with maternal mortality. While, Low maternal education, high parity, emergency caesarean delivery, and high risk patients risk independently predict maternal mortality.[7]

There is a high turnover of obstetric patients in south Punjab health care facilities with increasing number of un-booked obstetric cases. This study will help to reduce their morbidity and mortality in prevailing poor socio economic and low literate population of this region. As this aspect is not studied locally.

OPERATIONAL DEFINITION

Un-booked cases: Women who have never attended or attended antenatal clinics only once or twice was considered as un-booked case.

MATERIAL AND METHODS

This cross sectional study was conducted at Department of Obstetrics & Gynecology Bolan Medical Complex/Civil Hospital Quetta from January 2017 to June 2017.Total 182 obstetric patients having age range from 18-35 years, primary or multiparas were selected.

Patients having age >35 years, patients with any systemic disease like diabetes mellitus and hypertension on previous medical record, patients with ruptured uterus on the basis of history and examination, patients with 2 or more C-sections were excluded from the study.

An approval was taken from institutional review committee and written informed consent was taken from every patient.

Physical examination was done of all patients and history was taken. Caesarean section was performed in case of fetal or maternal complication. Mode of delivery was noted on pre-designed proforma as Cesarean Section or vaginal delivery. Demographic profile of all the patients along with booking status, income status, area of residence, education status and parity was also be noted on proforma.

All the data was entered on computer software SPSS version 16. The quantitative variables of the study i.e. age and gestational age were presented as Mean ± SD. The qualitative variables like booking status (booked or un-booked), mode of delivery (vaginal/c-section), Income status, educational status of the patients (educated or un-educated) and parity (primary para or multi para) were presented as frequency and percentages. Stratification was done for age, income status and residential area, education status and mode of delivery. Post stratification chi-square test was applied. P value ≤ 0.05 was considered as significance.

RESULTS

Total 182 obstetric patients were included in this study. Mean age of the patients was 25.26 ± 5.38 years.Out of 182 cases, booked cases were 82 (45%) and un-booked cases were 100 (55%). (Fig. 1) Total vaginal deliveries were 71 (39%) and caesarean section was performed in 111 (61%) cases. (Fig. 2)

Stratification of mode of delivery in relation to age was done and two groups were made, age group 18-27 years and age group 28-35 years. Total 124 (60.13%) patients were belonged to age group 18-27 years and 58 (31.87%) patients belonged to age group 28-35 years. Vaginal delivery was done in 45 (36.29%) cases and 26 (44.83%) cases of age group of 18-27 years and 28-35 years respectively. Age of the patients was insignificantly (P = 0.3281) associated with mode of delivery. (Table 1)

Out of 182 patients, 97 (53.3%) patients belonged to Rs. <15000 income group and vaginal delivery was performed in 40 (41.24%) patients. Total 57 (31.3%) patients belonged to income group 15001 to 30000 and vaginal delivery was performed in 19 (33.33%) patients and 28 (15.4%) patients belonged to income group >30000 and vaginal delivery was performed in 12 (42.86%) patients. (Table 2)

Stratification of mode of delivery was done in relation to area of residence. Total 116 (63.74%) patients belonged to rural area and 66 (36.26%) patients belonged to urban area. Vaginal deliveries were done in 48 (41.38%) in patients of rural area and 23 (34.85%) vaginal deliveries were done in patients of urban area. Insignificant (P = 0.4313) association between mode of delivery and residential area was observed. (Table 3)

Stratification of mode of delivery in relation to education status was done. Total 37 (20.33%) patients were un-educated followed by primary pass were 52 (28.57%), middle (33 (18.13%), matric 26 (14.29%) intermediae 21 (11.54%) and above intermediate 13 (7.14%). Vaginal deliveries were performed in 18 (48.65%), 25 (48.08%), 12 (36.36%), 10 (38.46%), 2 (9.52%) and 4 (30.77%) in un-educated, primary, middle, matric, intermediate and above intermediate patients. Significant (P = 0.044) association between education status and mode of delivery was noted. (Table 4)

Out of 182 patients, primary para was 101 (55.5%) and multipara was 81 (44.5%). Vaginal deliveries were performed in 43 (42.57%) primary para and 28 (34.57%) patients multipara. Insignificant (P = 0.2882) association between mode of delivery and parity was noted. (Table 5)

In this study, total 71 (39.01%) vaginal deliveries were done of which 36 (50.70%) cases were booked and 35 (49.3%) cases were un-booked. caesarean section was performed in 111 (60.99%) cases, of which booked cases were 46 (41.44%) and un-booked cases were 65 (56.56%). Statistically insignificant (P = 0.2835) association of booking status with mode of delivery was observed. (Table 6)

Fig. 1: Frequencies for booking status

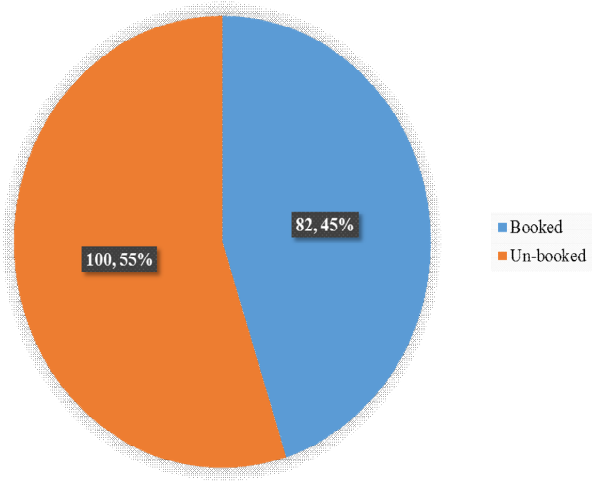

Fig. 2: Frequencies for mode of delivery

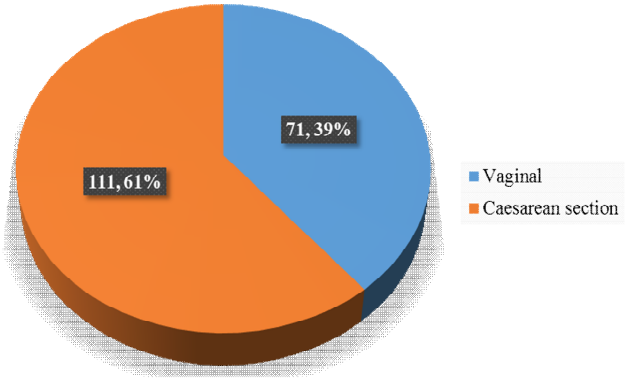

Table 1: Stratification for mode of delivery in relation to age

Age	Mode of delivery		Total	P. value
	Vaginal (%)	caesarean section (%)		
18-27	45 (36.29)	79 (63.71)	124 (60.13)	**0.3281**
28-35	26 (44.83)	32 (55.17)	58 (31.87)	
Total	**71 (39)**	**111 (61)**	**182**	

Table 2: Stratification for mode of delivery in relation to income status

Income status	Mode of delivery		Total	P. value
	Vaginal (%)	caesarean section (%)		
<15000	40 (41.24)	57 (58.76)	97 (53.3)	**0.5627**
15001-30000	19 (33.33)	38 (66.67)	57 (31.3)	
>30000	12 (42.86)	16 (57.14)	28 (15.4)	
Total	**71 (39)**	**111 (61)**	**182**	

Table 3: Stratification for mode of delivery in relation to residential area

Residential area	Mode of delivery		Total	P. value
	Vaginal (%)	caesarean section (%)		
Rural	48 (41.38)	68 (58.62)	116 (63.74)	**0.4313**
Urban	23 (34.85)	43 (65.15)	66 (36.26)	
Total	**71 (39)**	**111 (61)**	**182**	

Table 4: Stratification for mode of delivery in relation to education status

Education status	Mode of delivery		Total	P. value
	Vaginal (%)	caesarean section (%)		
Un-educated	18 (48.65)	19 (51.35)	37 (20.33)	
Primary	25 (48.08)	27 (51.92)	52 (28.57)	
Middle	12 (36.36)	21 (63.64)	33 (18.13)	
Matric	10 (38.46)	16 (61.54)	26 (14.29)	**0.044**
Intermediate	2 (9.52)	19 (90.48)	21 (11.54)	
Above Intermediate	4 (30.77)	9 (69.23)	13 (7.14)	
Total	**71 (39)**	**111 (61)**	**182**	

Table 5: Stratification for mode of delivery in relation to parity

Parity	Mode of delivery		Total	P. value
	Vaginal (%)	caesarean section (%)		
Primary Para	43 (42.57)	58 (57.43)	101 (55.5)	**0.2882**
Multipara	28 (34.57)	53 (65.43)	81 (44.5)	
Total	**71 (39)**	**111 (61)**	**182**	

Table 6: Stratification for booking status in relation to mode of delivery

Mode of delivery	Booking Status		Total	P. value
	Booked (%)	Un-booked (%)		
Vaginal	36 (50.70)	35 (49.3)	71 (39.01)	**0.2835**
caesarean section	46 (41.44)	65 (58.56)	111 (60.99)	
Total	**82 (45.05)**	**100 (54.95)**	**182**	

DISCUSSION

The key objective of maternal health care for pregnant women is to present themselves early for antenatal care in order to allow enough time for essential diagnosis and treatment regimens.[8]The objective of this study was to determine the frequency of un-booked cases among obstetric patients and their mode of delivery presenting at Civil Hospital, Quetta.

In this study out of 182 cases, booked cases were 45% and un-booked cases were 55%. In one study by Kaur et al,[8] the frequency of un-booked obstetric cases was 58%. Findings of this study is comparable with my study. Similarly Adelajaet al[9] reported frequency of un-booked cases as 60.3%. Omole-Ohonsi A et al[10] reported high percentage (89.1%) of un-booked obstetrics patients.

In present study most (53.30%) of the women belonged to low socio income status. Mothers with low socioeconomic scale used to deliver more frequently at home with no trained health attendant in the developing world.[11] On the other side, mothers of high socioeconomic scale had higher number in booked group (26.20%) as compared to their counterpart group (08.63%). It reveals that financial issue which includes cost of antenatal services and transportation might be cited as one of the factor affecting utilization of antenatal care.[12]

In this study 51.49% women were un-booked and 37.04% multipars were un-booked which is comparable with study by Fawcuset al.[13] This shows primiparous mothers are high risk patients. Comprehensive antenatal care should be provided to this group of patients to have better maternal and neonatal outcomes.[14]

In present study, total vaginal deliveries were 39% and caesarean section was performed in 61% cases. In one study, Kaur et al[5] reported caesarean deliveries as 66.67% and vaginal deliveries as 33.34% which is comparable with our findings.

In present study a higher number of patients belonged to younger age group. Most of the deliveries performed by caesarean section. No

association (P = 0.3281) was detected between mode of delivery and age of the patients.

In one study the analysis of demographic factors among booked and unbooked mothers showed that young age (p<0.001; 21-25 yrs) of mothers along with lack of awareness regarding importance of antenatal care & lack of education especially health education might have withdrawn them from taking antenatal care at an early gestational age or till the development of obstetric complication which had led them to fall into unbooked group.[5] This issue is also documented by other studies which concluded that women who are less than 25yrs old and less educated are more likely to register late.[13,15-16]

CONCLUSION

Results of this study reveal that most of the obstetric women were un-booked and C-section rate is very high. Most of the cases belonged to low socio-economic group and literacy rate was very low. Significant association between mode of delivery and education status was noted.

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