ORIGINAL ARTICLE

Frequency of Un-Booked Obstetric Patients and their Outcome

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ABSTRACT

Aim: To reduce the morbidity and mortality in prevailing poor socio economic and low literate population of this region.

Methods: This cross sectional study was conducted at Department of Obstetrics & Gynecology D.G Khan Hospital D.G Khan from February 2016 to August 2016. Total 182 un-booked obstetric patients having age 18-35 years both primary and multi paras were selected.

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. There is no association was found between booking status and mode of delivery. 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 depend[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

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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 may help to reduce their morbidity and mortality in prevailing poor socio economic and low literate population of this region.

MATERIAL AND METHODS

This cross sectional study was conducted at Department of Obstetrics & Gynecology D.G Khan Hospital D.G Khan from February 2016 to August 2016. Total 182 un-booked obstetric patients having age 18-35 years both primary and multi paras 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.

Women who have never attended or attended antenatal clinics only once or twice were considered as un-booked cases. An approval was taken from the institutional review committee of the hospital and written informed consent was taken from every patient.

Physical examination of all the patients was done 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 noted on proforma.

All the data was entered in SPSS version 18. 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) outcome (in term of mode of delivery vaginal or by caesarean section), Income status, education 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 booking status 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. Booked patients was 54 (43.55%) and un-booked patients was 70 (56.45%) in age group 18-27 years and in age group 28-35 booked patients were 28 (48.28%) and un-booked patients were 30(51.72%). Age of the patients was insignificantly (P=0.6320) associated with booking status (Table 1).

Out of 182 patients, 97(53.3%) patients belonged to Rs. <15000 income group and 50(51.55%) patients were booked and 47(48.45%)

patients were un-booked. Total 57(31.32%) patients belonged to income group 15001 to 30000 and in this group booked patients were 20(35.09%) and un-booked patients were 37(64.91%). In >30000 income group, booked patients were 12(42.86%) and un-booked patients were 16(57.14%). Insignificant (P=0.136) association between booking status and income status was seen (Table 2).

Stratification of booking status 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. Total 47(40.52%) booked patients and 69(59.48%) un-booked patients were belonged to rural area. Booked patients of urban area was 35 (53.03%) and un-booked patients were 31(46.97%). Insignificant (P=0.1398) association of booking status with residential area was noted (Table 3).

Stratification of booking status of patients in relation to education status was done. Insignificant (P=0.0723) association of booking status with parity was noted (Table 4).

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 5).

Table 1: Stratification for booking status in relation to age

Age	Booked	Unbooked	Total
18-27	54(43.55%)	70(56.45%)	124(68.13%)
28-35	28(48.28%)	30(51.72%)	58(31.87%)
Total	82(45.05%)	100(54.95%)	182

P value: 0.6320

Table 2: Stratification for booking status in relation to income status

Income status	Booked	Unbooked	Total
<15000	50(51.55%)	47(48.45%)	97(53.30%)
15001-30000	20(35.09%)	37(64.91%)	57(31.32%)
>30000	12(42.86%)	16(57.14%)	28(15.38%)
Total	82(45.05%)	100(54.95%)	182

P value: 0.136

Table 3: Stratification for booking status in relation to residential area

Area	Booked	Unbooked	Total
Rural	47(40.52%)	69(59.48%)	116(63.74%)
Urban	35(53.03%)	31(46.97%)	66(36.26%)
Total	82(45.05%)	100(54.95%)	182

P value: 0.1398

Table 4: Stratification for booking status in relation to parity

Parity	Booked	Unbooked	Total
Primary Para	52(51.49%)	49(58.51%)	101(55.49%)
Multipara	30(37.04%)	51(62.96%)	81(44.51%)
Total	82(45.05%)	100(54.95%)	182

P value: 0.0723

Table 5: Stratification for booking status in relation to mode of delivery

Mode of delivery	Booked	Unbooked	Total
Vaginal	36(50.70%)	35(49.3%)	71(39.01%)
caesarean section	46(41.44%)	65(58.56%)	111(60.99%)
Total	82(45.05%)	100(54.95%)	182

P value: 0.2835

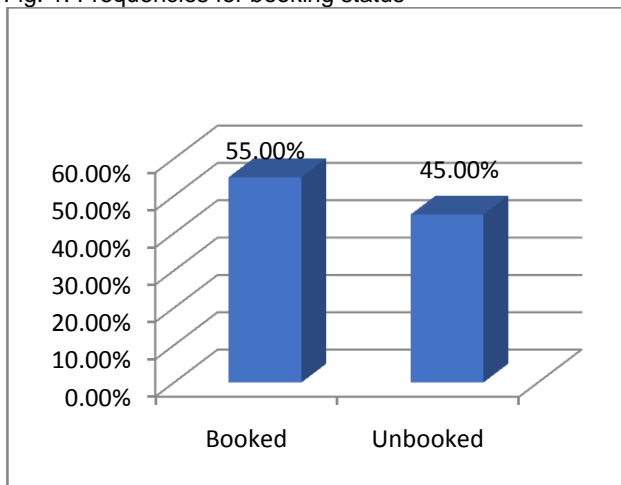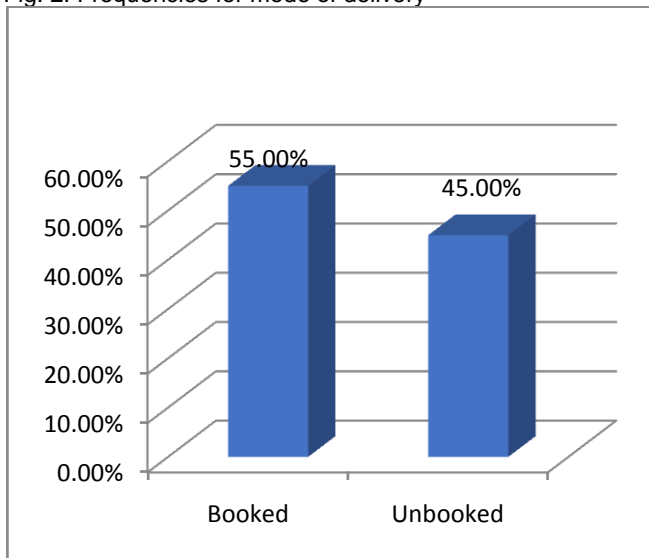Fig. 1: Frequencies for booking status

Fig. 2: Frequencies for mode of delivery

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 outcome presenting at D.G Khan Hospital D.G Khan.

In this study out of 182 cases, booked cases were 45% and un-booked cases were 55%. In one study by Kaur et al[9] the frequency of un-booked obstetric cases was 58%. Findings of this study is comparable with my study. Similarly Adelaja et al[10] reported frequency of un-booked cases as 60.3%. Omole-Ohonsi A et al[11] 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.[12] 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[13].

In this study 51.49% women were un-booked and 37.04% multipars were un-booked which is comparable with study by Fawcuset al.[14] 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[15].

In present study, total vaginal deliveries were 39% and caesarean section was performed in 61% cases. In one study, Kaur et al[9] 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 were 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 un-booked group[9]. This issue is also documented by other studies which concluded that

women who are less than 25 yrs old and less educated are more likely to register late[16-17].

CONCLUSION

Results of this study reveals that most of the obstetric women were un-booked and C-section rate is very high. There is no association was found between booking status and mode of delivery. 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.

REFERENCES

1. Mutihir JT, Nyiputen YA. The unbooked patient: A lingering obstetric pathology in Jos, Nigeria. Journal of Obstetrics & Gynecology. 2007;27(7):695–8.
2. Nisar N, White E. Factors affecting utilization of Antenatal Care among reproductive age group Women (15-49 years) in an urban squatter settlement of Karachi. *J Pak Med Assoc.*2003;53(2):47-53.
3. Kabir R, Khan TA . Utilization of Antenatal care among pregnant women of Urban Slums of Dhaka City, Bangladesh. J Nur Health Sci. 2013;2(2):15–9.
4. Babalola S, Fatusi A. Determinants of use of maternal health services in Nigeria-looking beyond individual and household factors. BMC Pregnancy Childbirth. 2009;9:43.
5. Alexander GR, Kotelchuck M. Assessing the role and effectiveness of prenatal care: history, challenges, and directions for future research. Public Health Rep. 2001;116(4):306–16.
6. Owolabi AT, Fatusi AO, Kuti O, Adeyemi A, Faturoti SO, Obiajuwa PO. Maternal complications and perinatal outcomes in booked and unbooked Nigerian mothers. Singapore Med J. 2008 Jul;49(7):526–31.
7. Fawole AO, Shah A, Fabanwo AO, Adegbola O, Adewunmi AA, Eniayewun AB, et al. Predictors of maternal mortality in institutional deliveries in Nigeria. Afr Health Sci. 2012 Mar;12(1):32–40.
8. Oladokun A, Oladokun RE, Morhason-Bello I, Bello AF, Adedokun B. Proximate predictors of early antenatal registration among Nigerian pregnant women. Ann Afr Med. 2010 Dec;9(4):222–5.
9. Kaur J, Kaur K. Does an Antenatal Care make a difference? Human Biology Review. 2013;2(2):120–135.
10. Adelaja L M, Taiwo O O. Maternal and Fetal Outcome of Obstetric Emergencies in a Tertiary Health Institution in South-Western Nigeria. ISRN Obstet Gynecol. 2011;2011:1–4.
11. Omole-Ohonsi A, Attah R. Risk factors for ruptured uterus in a developing country. Gynecol Obstetric. 2011; 1:102. doi:10.4172/2161-0932.1000102.
12. Wagle RR, Sabroe S, Nielsen BB. Socioeconomic and physical distance to the maternity hospital as predictors for place of delivery: an observation study from Nepal. BMC Pregnancy Childbirth. 2004 May 22;4(1):8.
13. Ye Y, Yoshida Y, Harun-Or-Rashid M, Sakamoto J. Factors affecting the utilization of antenatal care services among women in Kham District, Xiengkhouang province, Lao PDR. Nagoya J Med Sci. 2010 Feb;72(1–2):23–33.
14. Fawcus SR, Crowther CA, Van Baelen P, Marumahoko J. Booked and unbooked mothers delivering at Harare Maternity Hospital, Zimbabwe: a comparison of maternal characteristics and foetal outcome. Cent Afr J Med. 1992 Oct;38(10):402–8.
15. Danish N, Fawad A, Abbasi N. Assessment of pregnancy outcome in primigravida: comparison between booked and un-booked patients. J Ayub Med Coll Abbottabad. 2010 Jun;22(2):23–5.
16. Adekanle DA, Adeyemi AS, Fadero FF. Booking status and caesarean section outcome in LAUTECH teaching hospital, Osogbo. Nigerian Journal of Medicine [Internet]. African Journals Online (AJOL); 2008 Apr 22;17(1). Available from: http://dx.doi.org/10.4314/njm.v17i1.37349
17. Chigbu B, Onwere S, Kamanu CI, Aluka C, Okoro O, Adibe E. Pregnancy outcome in booked and unbooked mothers in South Eastern Nigeria. East Afr Med J. 2009 Jun;86(6):267–71.