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Original Research Article

Fetomaternal Outcome in Indoor Booked and Emergency Patients: A Prospective Observational Study

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Abstract

Background and Aim: Pregnancy is not a disease and pregnancy related morbidity and mortality are preventable. In view of current maternal mortality situation in India, it is pertinent to determine the relationship between the booking status of mother and maternal outcomes. Hence this study was aimed to determine maternal & fetal outcomes in Booked and Emergency patients.

Materials and Method: Booked patients are those who have ≥ 3 Antenatal visits, while Emergency (Unbooked) patients are those who had < 3 Antenatal visits. In my present study 500 patients were studied from August 2018 to July 2019 in department of Obstetrics and Gynecology. Among these 300 patients were Booked and 200 patients were Emergency patients (Unbooked).

Results: DIC, vaginal, cervical & perineal tear were slightly high in unbooked pts compared to booked patients. Cesarean hysterectomy was 3% in unbooked patients & 0.6% in booked pts. Wound gap was most common post partum complication which includes episiotomy and cesarean wound gap. Postpartum complications were more in unbooked patients compared to booked patients.

Conclusion: Most maternal and perinatal deaths are preventable if complications are diagnosed and managed effectively in time. Hence targeted, integrated, patient friendly, affordable and accessible health services need to be delivered in an equitable manner so as to improve the outcome for many antenatal patients.

Keywords: Complications, Fetal, Pregnancy, Maternal

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Introduction

Human development has 2 main facets, namely genetic & environment. Understanding of environmental factors play a major role in understanding and implementation of health programmes. It is universal fact that any work done under supervision always gives good output [1,2]. Pregnancy is not a disease and pregnancy related morbidity and mortality are preventable. In many parts of the

developing world complications related to pregnancy and childbirth are among the leading causes of morbidity & mortality of women of reproductive age. Life threatening complications can occur any time before, during and after delivery. If they are identified & addressed timely and if the basic & comprehensive emergency obstetrics services are provided to all pregnant women closer to their homes, most of maternal & perinatal deaths can be prevented [3,4].

Leading causes of maternal morbidity and mortality are:

1. Hemorrhage[25%](Antepartum,Post-partum)
2. Hypertensive disorders[12%](PIH,Eclampsia)
3. Puerperal sepsis[15%]
4. Others
5. Indirect causes

These are preventable by good antenatal care, timely identifying high risk factor, prompt referral, hospital delivery. The burning problem at present is, why mothers do not seek for medical advice, eventhough services are available to them. The faults at all the levels should be improved. Health education is extremely important. Transport facilities should be improved. At institutional level ignorance, crowded OPD, disinterest play major role not to seek medical advice.

Approach of the patient to the doctor should be made as easy as possible. Well planned programme is essential for covering the whole population, under ANC. Teaching institutions, non-teaching institutions, district hospitals, small maternity homes, PHCs, should be arranged in such a way that every women gets antenatal care. Flying Squads should be arranged for emergencies.

In view of current maternal mortality situation in India, it is pertinent to determine the relationship between the booking status of mother and maternal outcomes. Hence this study was aimed to determine maternal & fetal outcomes in Booked and Emergency patients. Booked patients are those who had ≥ 3 antenatal visits,while Emergency(Unbooked) patients are those who had <3 antenatal visits throughout her pregnancy. In my present study 500 patients were studied from August 2018 to July 2019 in department of Obstetrics and Gynecology. Among these 300 patients were Booked and 200 patients were Emergency patients (Unbooked) [5].

All types of complications were higher in unbooked patients. Fetomaternal outcome was good in booked patients. Hence, targeted, integrated, patient friendly, affordable and accessible health services need to be delivered in an equitable manner to improve the outcome for many antenatal patients.

Materials & Methods

This was a Prospective, observational study of 500 admitted patients in Labour room, Department of Obstetrics and Gynecology during period of August 2018 to July 2019. The Institute is reasonably well equipped and with neonatal care unit. The present study was approved by the ethical clearance certificate of the ethical committee. The study proposal was approved and recognized by the Indian council of medical research, New Delhi.

In the present study the detailed history of present and past was recorded. The information related to medical, obstetrical and surgical information were recorded. The detail examinations of the patients were done. Obstetric examination was performed for presentation and gestational age, fetal heart rate.

Ultrasonography was done for assessing presentation, gestational age, liquor and fetal well being. Routine and specific investigations were carried out. Final diagnosis was made and patients were treated accordingly. Booked patients are those who have ≥ 3 Antenatal visits, while Emergency (Unbooked) patients are those who had < 3 Antenatal visits. Direct patients were those who came to hospital

directly without any reference and referred patients were those who came to hospital by 108 or their own ways with reference.

Results

Principle aim of antenatal care is the early recognition in management of high risk patients. Adequate antenatal and delivery care enables obstetricians to diagnose complications at an early stage and hence intervention brings about better results.

This study demonstrated the age, literacy rate, socio-economical conditions, obstetrical and fetal outcome and complication between the booked and unbooked patients. The booked patients were those who have taken ≥ 3 antenatal visits throughout pregnancy and unbooked patients were those who have taken < 3 antenatal visits. Out of 500 patients in my study, booked patients were 300(60%) and unbooked patients were 200(40%).

Maximum no. of cases (320) was seen between 21- 30yrs, 220 were booked and 100 were unbooked. In < 20yrs age group, 45 were booked and 55 were unbooked while in >31yrs age group, 35 were booked & 45 were unbooked. These results are comparable with Aggrawal*et al* study (2013).

Lower socio-economical class have 155 unbooked patients and 119 booked patients. Middle S.E. class shows 160 were booked and 45 were unbooked. Upper S.E. class shows 21 booked patients and 0% unbooked patients. These results are comparable between present study and F aamir*et al* study (2012).

In primipara group, 219 patients were booked and 84 patients were unbooked. In multipara group 76 patients were booked and 101 patients were unbooked. In grand multipara group 5 patients were booked and 15 patients were unbooked.

Fetal distress was high in unbooked patients 47 compared to booked patients 24. PROM was high in unbooked patients 52 compared to booked patients 21.Similarly prolonged labour was high in unbooked patients 21 compared to booked patients.

DIC, vaginal, cervical & perineal tear were slightly high in unbookedpts compared to booked patients. Cesarean hysterectomy was 3% in unbooked patients & 0.6% in booked pts. In unbooked patients out of 6 ceserean hysterectomy 3 were for atonic PPH + anemia and 2 were for placenta previa and 1 for ruptured uterus. While in booked patients 2 cesarean hysterectomy done for complete placenta previa. Uterine rupture was only seen in unbooked patient.

Wound gap was most common post partum complication which includes episiotomy and cesarean wound gap. In booked patients wound gap was 31, post partun pyrexia was 22 and PPH was 20. In unbooked patients wound gap was found in 64 patients, post partum pyrexia was seen in 51and PPH was seen in 30patients. Postpartum complications were more in unbooked patients compared to booked patients.

Vaginal delivery was done in 200 of the booked patients and 76 patients in unbooked patients. Cesarean section was done in 82 of the booked patients and 108 in unbooked patients. Assisted breech delivery was done in 14 of all booked patients and 8 among the unbooked. Vaginal birth after CS was 4 in booked patients and 6 in unbooked patients. Emergency laprotomy was done in 2 of unbooked patients for ruptured uterus. So vaginal delivery was higher in booked patients while caesarean section rate was higher in unbooked patients.

Discussion

In early days of medicine, the obstetrics, gynecology and surgery was included in anatomy. During early part of 19th century the surgery separated from anatomy for the first time and then within few years the obstetrics was separted from surgery [6]. Antenatal care is a branch of preventive medicine dealing with presymptomatic diagnosis of general medical disorders, nutrition, immunology, health education

and social medicine in addition toprevention and early detection of pregnancy disorders [7,8].

In <20 yrs group illiteracy, early marriages, lack of awareness, no family support, unwillingness to attend hospital are responsible factors in present study. The 21-30 yrs age group belongs to reproductive age group.

In these group patients are aware and mature enough about importance of antenatal care. In>31yrs group, no. of patients are more compare to other study, because of lower socio-economical class, lack of money, lack of transport facility, multiparity, social stigma for home delivery by dais are responsible factors for not to seek antenatal care [9].

Illiteracy, lack of awareness, lack of money, lack of transport facilities, unwillingness to attend hospital are responsible factors for unbooking status of patients in low socio-economical class [10].

In booked patients most of the patients were literate and middle upper S.E. class for these reason primi patients were more in this group while in unbooked patients, multiparous patients were more because of illiteracy, lower S.E. class and social stigma for home delivery.

Lack of awareness, illiteracy, lower socio-economical class, no family support, prolonged trial of labour for vaginal delivery by untrained dais resulted in more intra partum complications in unbooked patients. These observations suggest that complications directly reflect antenatal care received by patients. Antepartum, intrapartum and postpartum complications were closely related to each other and all these complications were found higher in unbooked patients.

Conclusions

Most maternal and perinatal deaths are preventable if complications are diagnosed and managed effectively in time. The classical 3 delays include delay in decision to seek help, delay in getting transport and delay in providing effective treatment in time. Hence targeted, integrated, patient friendly, affordable and accessible health services need to be delivered in an equitable manner so as to improve the outcome for many antenatal patients.

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