

THE DEMOGRAPHIC CHARACTERISTICS AND HEALTH SEEKING BEHAVIOUR OF UNBOOKED PATIENTS IN IRRUA SPECIALIST TEACHING HOSPITAL

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ABSTRACT

Background: The Obstetric outcome of the patients who receive antenatal care and deliver at the Irrua Specialist Teaching Hospital is reasonably satisfactory. Our major challenges arise from unbooked emergencies. The aim of this study was to determine the frequency of unbooked patients in the Irrua Specialist Teaching Hospital, their clinical presentation, their demographic characteristics as well as their obstetric outcome.

Methods: A structured proforma was used to collect relevant information over a one-year period from patients' case notes, theatre records and labour ward records.

Results: During the study period, unbooked patients constituted 14.7% of all deliveries. They had a higher proportion of teenagers ($p < 0.0000$) and women over 40 years ($p < 0.0000$) when compared to the booked patients. There were also a higher proportion of primigravidas and grandmultiparous women but these did not reach statistical significance. Unbooked patients are also more likely to be single ($p < 0.001$) and polygamous ($p < 0.0002$) when compared to the booked patients. The diagnosis on admission included obstructed labour (18.2%), intrauterine fetal death (14.9%), ante partum haemorrhage (12.4%), post date (12.4%) and eclampsia (8.3%). Eighteen (14.9%) of the unbooked patients had no antenatal care whatsoever, while sixteen 13.2% had been visiting TBAs for some care in pregnancy. Maternal mortality for the unbooked patients was 5/121 (4.1%). There was no maternal death amongst booked patients during the study.

Conclusion: The unbooked patients are relatively high-risk patients with some social disadvantage. They have a high maternal mortality.

Keywords: Demographic characteristics; Unbooked patients; Irrua.

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INTRODUCTION

The poor obstetric outcome in developing countries continues to pose a major reproductive health problem. Hospital based figures for maternal mortality are outrageous. In the last Society of Gynaecology and Obstetrics of Nigeria (SOGON) conference, maternal mortality ratio ranged from 727 to 7523/100000 in various Hospitals in Nigeria². In Irrua Specialist Teaching Hospital maternal mortality ratio is 1747/100,000¹. Limited resources available to address this issue suggest that efforts must focus on factors and areas that would yield the maximum benefits. In the Irrua initiative, which essentially is a programme aimed at improving maternal health in Irrua and her environs, we chose to focus on unbooked patients in this quarter. The Obstetric outcome of patients who attend antenatal clinic and deliver in our facility is reasonably satisfactory¹, our major challenges arise from unbooked emergencies who present in the labour ward without prior booking in our facility³. We therefore sought to quantify the morbidity and mortality associated with the unbooked patients as well as obtain other relevant information about their health seeking behaviour. These will form the basis of strategy formulation for programme implementation.

AIMS AND OBJECTIVES

The aim of this study is to determine the frequency and demographic characteristics of unbooked patients presenting to the Irrua specialist Teaching Hospital. We will also document their health seeking behaviour, the diagnosis at admission and the obstetric outcome. Finally strategies will be formulated for programme implementation in the Irrua initiative.

MATERIALS AND METHODS

Study site

Irrua Specialist Teaching Hospital is located in Irrua, the administrative headquarters of Esan Central Local Government area of Edo State. It is situated on the Ishan plateau, about 87 kilometres North of Benin City, the Edo State capital. It is a 260 – Bed hospital with bed

Table 1: Demographic characteristics

Age distribution					
Age	Unbooked	Percentage	Booked	Percentage	
≤ 19	16	13.2	8	1.1	P=0.0000
20-24	26	21.5	46	6.5	
25-29	31	25.6	270	38.4	
30-34	222	18.2	274	38.9	
35-39	21	17.4	101	14.4	
≤ 40	5	4.1	5	0.7	P=0.0000
Total	121	100	704	100	
Parity Distribution					
Parity	Unbooked	Percentage	Booked	Percentage	
0	45	37.2	204	29.0	P=0.08712
1	15	12.4	129	18.3	
2	10	8.3	144	20.5	
3	10	8.3	76	10.8	
4	19	15.7	83	11.8	
=5	22	15.2	68	9.7	P=0.0088
Total	121	100	704	100	
Educational Attainment					
yrs in school	Unbooked	Percentage	Booked	Percentage	
Nil	13	10.7	0	0	
1 ^o (< 6yrs)	56	46.3	154	21.9	
2 ^o (7-12yrs)	37	30.6	217	30.8	
3 ^o (> 12yrs)	15	12.4	33	47.3	
Total	121	100	704	100	
Marital status					
Unbooked					
Percentage					
Booked					
Percentage					
Single	13	10.7	8	1.1	P=0.0000
Monogamy	91	75.2	674	95.8	
Polygamy	17	14.1	22	3.1	P=0.0002
Total	121	100	704	100	

Table II shows the parity distribution of the patients. There is a higher proportion of primigravid ($P = 0.0871$) and grandmultiparous women (0.0088) amongst the unbooked. Thirteen (10.7%) of the unbooked patients were unmarried compared to 8/704 (1.1%) of booked patients. (P value = 0.0000). Similarly, 17 (14.1%) of unbooked patients were in polygamous marriage while 22 (3.1%) of booked patients were in polygamous marriage (p value = 0.0002). Table 3 showed that booked patients had significantly more education.

Table II: Diagnosis on admission

Maternal complication/diagnosis	Number	Percentage
Obstructed labour	22	18.2
Intrauterine fetal death	18	14.9
Ante partum haemorrhage	15	12.4
Post date	15	12.4
Eclampsia	10	8.3
Premature rupture of memb	8	6.6
Preg. Induced hypertension	8	6.6
NIL complication	10	8.3

Table III: Health facility utilized by unbooked patients.

Antenatal care facility	Number	Percentage
Nil	18	14.9
Traditional birth attendant	16	13.2
Midwife maternity	30	24.7
Hospital	57	47.2
Total	121	100
Referral facility	Number	Percentage
Home	34	28.1
Traditional birth attendant	10	8.3
Midwife maternity	25	20.7
Hospital	52	42.9
Total	121	100

The diagnoses on admission in the unbooked patients were obstructed labour in 22 (18.2%), intrauterine fetal death 18 (14.9%), ante partum haemorrhage 15 (12.4%), postdate 15 (12.4%), eclampsia 10 (8.3%) and normal labour 10 (8.3%). Premature rupture of membrane and pregnancy induced hypertension constituted 8 (6.6%) each. Eighteen (14.9%) of the total unbooked patient had no prior antenatal clinic while 13.2% had been visiting traditional birth attendants. Thirty (24.8%) and fifty seven (47.2%) unbooked patients had received antenatal care from homes supervised by midwife and hospital respectively. The caesarean section rate for unbooked patient was 64.5% while it was 23.3% for

booked patients, the perinatal mortality ratio for the unbooked patients was 28.9% while for the booked patients, and the perinatal mortality ratio was 2.3%. The maternal mortality ratio for unbooked patient in this study was 4.13% and for the booked women there was no maternal death.

DISCUSSION

This study like some others in similar settings show that the majority of labour ward morbidity and mortality, arise from unbooked emergencies^{4,5}. This apparently is due to various factors. There is a significant higher proportion of teenagers and women over 40 years of age amongst the unbooked patients. There is also a higher proportion of primigravida and grand multiparous women amongst the unbooked patient. Similar findings of such large proportion of high risk pregnancies amongst unbooked patients was reported in Zimbabwe and the authors concluded that unbooked mothers are a high risk group who ordinarily should be targeted for antenatal care and early booking⁶. They are also women who should under normal circumstance deliver in facilities where some specialist services can be rendered.

This study also suggests that unbooked patient may have significant socio-economic disadvantage. Many of them were unmarried and when married, they were more likely to be in polygamous marriages when compared to booked patients. Unbooked patients also had lower levels of education. Such socio-economic disadvantage affects women's health, especially when there is culturally motivated gender bias^{7, 8}. In such circumstances, women may enter pregnancy in already compromised health and this is worsened by poor health seeking behaviour. The reproductive health consequences of single motherhood, polygamy, gender bias and low social class is well documented^{9,10} it has been suggested that increasing female education and female power will go a long way to reduce maternal mortality.^{9,10}

Many unbooked patients in this study had received some antenatal care and some also received care from a referral center before presenting in our facility. The adequacy of care cannot be determined by this study. However some authors have shown that 74.7% of case referred to tertiary centers were mismanaged and such mismanagement contributed significantly to mortality and long term morbidity.⁴ These authors also suspect that similar factors operate in our circumstance; hence the severity of complications and poor outcome

for the unbooked patients. The aseptic techniques of traditional birth attendant promote infection¹¹. The level of training and retraining of staffs of maternity as well as hospital can be quite inadequate. The need to maximize economic benefit may motivate some private health facility to "bite more than they can chew". Furthermore staffs of peripheral health facility may also delay referrals in order not to appear "incompetent" to their patient and relatives. It is pertinent to state that while this is a referral center, outcome is best when referrals are made early when there is a risk of complications, even before such complications develop. When complications occur, referrals should be early and prompt before patient becomes unstable or organ failure sets in. When patients are referred late, severe complications with deranged vital signs and organ failure will require a rescue mission which many tertiary centers in our circumstance are unable to handle. Unfortunately many unbooked patient present in such states.

Delay in decision to go to a referral system may also occur as a result socio- cultural factors. Many cultures in our environment still attribute pregnancy complications to evil powers¹². There may also be this view that tertiary centers are elitist and expensive. Financial constraint on the part of patients' relatives could also be another reason for late referrals. In the delay model of the cause of maternal mortality, Type I delay describes delay in taking the decision to go to a referral center. Type II delay is delay from lack of transportation facility, while the Type III delay is delay from getting appropriate attention in the referral center. In a recent presentation at the 38th International Conference of the Society Gynaecology and Obstetrics of Nigeria, Type I and Type III delays were associated with maternal mortality in the Irrua Specialist Teaching Hospital.²

To address the problems of the unbooked patient, there is need to ensure that patients present early before severe complications set in. Building relationships between the various levels of health facilities can promote early and prompt referrals. Health monitoring teams will also ensure health facility maintain certain minimum standards. Training and retraining of staffs of various health facilities will ensure competence, dedication and motivation.

The ability of our facility to respond to the challenges of the unbooked patient will depend on quick specialist intervention, availability of drugs, infusion, blood and blood products as well as intensive monitors and availability of equipment for the management of severe complications. Anaesthetic as well as specialist neonatal services are important for final obstetric outcome.¹³

Community education will also go a long way in addressing the problems of unbooked patients. Health education via antenatal clinics may need to be structured to provide relevant and adequate information. The need for antenatal booking, skilled attendant delivery and understanding the symptoms and signs of pregnancy complication must be emphasized. The use of posters, handbill, and banners can be helpful. The electronic media is very instructive, with dramas, songs and other presentations. Electronic media is an effective community education instrument. Addressing issues of female education gender bias and poverty have short and long term advantage in the overall reproductive health status of women.

In conclusion, the unbooked patients are high risk patients with socio-economic disadvantage. They have a poor health seeking behaviour and a high maternal morbidity and mortality. Health education, improved facilities, training and retraining of staffs will address many of the issues raised. There is also need to monitor health facilities services and build up relationships Betweenvarioius various levels of referral facilities.

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