



Maternal and Foetal Outcome of Grand Multipara

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Abstract

Introduction: *Pregnancy in grand multipara has been considered as high risk because there is higher chance of complication during pregnancy, labour and puerperium.*

Objective: *To evaluate various maternal and foetal complications associated with a grand multipara during pregnancy, delivery and puerperium.*

Methods: *This prospective study was carried out from 1st January 2016 to 31st December 2016 in obstetrics and gynaecology department of Gonoshasthaya Nogar Hospital, Dhanmondi, Dhaka. 200 grand multipara pregnant patients were selected those who got admitted in department of obstetrics and gynaecology, Gonoshasthaya Nogar, Hospital during that period.*

Results: *It was found that incidence of grand multipara was 9.8%. Majority of the patient were 31-35 years old (51%). 71% patients never had antenatal check up. Caesarean section was high about 45%. Complications during labour were also high .Is was about 45%. Maternal morbidity was about 16%. Perinatal mortality was about 9.5%.*

Keywords: *Pregnancy, Maternal and Foetal Outcome, Grand Multipara.*

Introduction

Parity refers to the number of previous pregnancies of more than 28 weeks and grand multipara is the condition of giving birth following 5 or more previous pregnancies. Grand multiparity is still high in Bangladesh among women of low socioeconomic class and in those getting married at a young age.

Other factors contributing to its prevalence are illiteracy and religious beliefs. The definition of grand multipara varies from study to study¹⁻⁵. Toohey, et al⁵ have used the definition of parity greater or equal to 5. The international federation of Gynaecology and Obstetrics in 1993 defined grand multipara as delivery of 5th or more infants. The incidence of grand multipara is very low in economically developed countries. It occurs in

some population or community mainly in those where contraception is not accepted because of specific religious or cultural beliefs⁶. Grand multipara is associated with long list of complication, which include, preterm labour, anaemia, pendulous abdomen, malpresentation, pre-eclampsia, placenta praevia and abruption placenta. Labour among grand multipara patients is not without complication and is regarded as a high risk labour because of complications, like uterine atony, postpartum haemorrhage, obstructed labour, ruptured uterus and higher incidence of operative delivery. Increase rate of operative delivery due to abnormal position and big baby and maternal exhaustion. The main purpose of this study was to evaluate the maternal and fatal outcome of grand multipara patient.

Methodology

This study was a hospital based observational cross sectional study, carried out in in patient

department of obstetrics and gynaecology, of Gonosashthaya Nogar hospital, Dhanmondi ,Dhaka in between 1st January 2016 to 31st December 2016. Total 200 grand multipara pregnant patients were selected those who got admitted in department of obstetrics and gynaecology GNH. Data was collected by preformed questionnaire and check list. Cases were selected according to inclusion and exclusion criteria. Relevant information (according to questionnaire) were taken from patients. Data was processed manually and analyzed with the help of SPSS (statistical package for social sciences) version 16.0.

Results

In GNH total 200 grand multipara patients out of 2039 obstetrics patients were admitted from January 2016 to December 2016 giving the incidence of 9.8% and following results were found.

Table 1

Age distribution

SL No	Age in years	Number of patient (n-200)	Percentage
1	16-20	0	0%
2	21-25	0	0%
3	26-30	66	33%
4	31-35	102	51%
5	36-40	26	13%
6	41->	6	3%
Total		200	100%

Table 1 Highest number of (51%) grand multipara belonged to 31-35 years.

Table 2

Antenatal check up

SL NO	ANC	No of patient (n-200)	Percentage
1	Regular	18	9%
2	Irregular	40	20%
3	No	142	71%
Total		200	100%

Table 2 Majority of the patient (71%) had no ANC.

Table 3

Presence of risk factors during admission of patient

SL NO	Risk Factors	Number of patient (n-200)	Percentage
1	Anaemia	160	80%
2	Pre eclampsia	10	05%
3	Eclampsia	02	01%
4	Malpresentation	08	04%
5	Oligohydramnios	05	2.5%
6	Polyhydramnios	04	02%
7	APH	06	03%
8	DM	05	2.5%
		200	100%

Table 3: Major number of grand multipara patient suffered from anaemia (80%), pre eclampsia (5%), malpresentation (4%), APH (3%).

Table 4

Mode of delivery

SL NO	Mode of delivery	Number of patient (n-200)	Percentage
1	Vaginal delivery	102	51%
2	LSCS	90	45%
3	Forceps	08	04%
		200	100%

Table 4 : Operative intervention in the form of caesarean section was high.

Table 5

Complication during delivery

SL NO	Complication	Number of patient	Percentage
1	Prolonged Labour	60	30%
2	Obstructed Labour	12	06%
3	Retained Placenta	10	05%
4	PPH	08	04%
		90	45%

Table -5: Major number of the patient suffered from prolonged labour (30%), obstructed labour (6%) and PPH (4%).

Table -6

Maternal morbidity following delivery.

SL NO	Type of Morbidity	Number of patient	Percentage
1	Hypertension	14	07%
2	Wound infection	07	3.5%
3	Psychosis	06	03%
4	Retention of urine	05	2.5%
Total		32	16%

Table 6: Grand multipara suffered from different types of morbidity such as hypertension (7%), wound infection (3.5%), psychosis (3%), retention of urine (2.5%)

Table 7

Foetal Status

SL NO	Condition of Foetus	Number of patient(n-200)	Percentage
1	Live birth	181	90.5%
2	Still birth	19	9.5%
		200	100%

Table 7: Showed that live birth was 90.5% and still birth was 9.5%.

Discussion

Grand multipara is well known risk factor for the pregnant women with increased risk of maternal and fetal morbidity and mortality. There is increased incidence of obstetrical medical complications. For cultural and religious reasons grand multipara is not uncommon in our country. Lack of family planning results in the ultimate increase in the number of grand multipara women. The present study findings were discussed and compared with previously published relevant studies.

The frequency (9.8%) of grand multipara found in this study was comparable with other studies²⁻⁵. This study found a higher of these women in age group between 31-35 years (51%). This finding was consistent with the study of Saadia et al⁶. However, a higher frequency of grand multiparity in the age group >35 years has been reported by Munium et al² and Karim et al⁷. While Samueloff et al⁷ reported the highest number of women in the age group between 30-35 years. In this study most of the patient (71%) did not receive any antenatal check up.

Similar result was also found by Karim et al⁷. This study showed anaemia was 80%. This was because there was not enough interval between pregnancies for the women to replenish the iron stores. This finding was higher than reported by Munium et al², Saadia et al⁶ and Karim et al⁷.

Hypertensive disorder of pregnancy was 7%. This was explained by increased age of this group. The same finding were Vehaskari et al⁹, Maymon et al¹⁰ and Al-Sibia et al¹¹.

Antepartum haemorrhage was found in 3%. AZZIZFA¹² had reported antepartum haemorrhage significantly increased in grand multipara. In this current study it was observed that malpresentation was 4%. This findings agree with the findings done by Sibai et al¹¹ while Vehaskari et al⁹.

In this study, more number of cases (45%) required caesarean section. In contrast to the study done by Munium et al², who found no significant difference in the prevalence rate of caesarean section or normal delivery. However, in other

studies conducted by Evaldson¹³, Ozumba¹⁴ and Irvine¹⁵ increased caesarean section rate was found among grand multipara which correlates with this study. In this present study it was observed that prolonged labour was 30%, this finding co-relates with that of other studies¹³⁻¹⁵. This study had shown that increased incidence of obstructed labour (6%) in grand multipara, which was consistent with other studies^{13-15, 17}. In this study PPH was 4%. This agree with the study done in Nigeria¹⁶.

In this study, like fetal outcome was 90.5%, and still birth 9.5%. This still birth in our study is higher compared to study by Saadia et al⁶. It could be related to the fact that most patients arrived late having an already intrauterine death or with hypoxic babies.

Conclusion

Grand multipara still had high risk pregnancy. In this study grand multipara was also associated with adverse maternal and fetal outcomes. Most grand multipara was of older age and poor socio economic status. So, improvement in social class, health education, use of contraception and good antenatal and intrapartum monitoring are needed.

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