Obstetrical Outcome of Grand Multipara

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Summary:

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

Objective: To evaluate various maternal and fetal complication associated with a grand multipara during pregnancy, delivery and puerperium.

Methods: This prospective study was carried out from 1st January 2008 to 31st December 2008 in Obstetrics & Gynecology Department of Sylhet MAG Osmani Medical College & Hospital, Sylhet. 300 grand multipara pregnant patients were selected those who got admitted in Department of Obstetrics & Gynecology, SOMCH during that period.

Result: It was found that incidence of grand multipara was 6.60%. Majority of the patient were between 31–35 years old (43%). 66% patients never had anternal checkup, Caesarean section was high about 47%. Complications during labour were also high. It was about 51.67%. Maternal morbidity was about 16%. Perinatal mortality was about 11%.

Conclusion: This study showed that grand multipara is a major risk for obstetrical outcome and needs strick supervision and good antenatal, intranatal and postnatal care.

Key words : Grand multipara, Fetal outcome, Maternal outcome, Risk fector.

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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.[1] Grand multiparity is still high in Bangladesh among women of low socio – economic 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 study[1-5]. Toohey, et al[5] 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 beliefs.[6] Grandmultipara is associated with a long list of complication, which include, preterm labour, anemia, pendulous abdomen, malpresentation, pre-eclampsia, placentaprevia and abuptio placenta. Labour among grand multiparous patients is not without complications and is regarded as a high risk labour because of complications, like uterine atony,postpartum hemorrhage, 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 fetal outcome of grand multipara patient .

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Materials and methods:

This study was a hospital based Observational cross sectional study, carried out in IPD (inpatient department) of Obstetrics and Gynecology of Sylhet M.A.G Osmani Medical College and Hospital (SOMCH), Sylhet in between 1st January 2008 to 31st December 2008. Total 300 grand multipara pregnant patients were selected those who got admitted in department of Obstetrics & Gynecology, SOMCH Data was collected by using a preformed questionnaire and check list. Cases were selected according to inclusion and exclusion criteria. Relevant infromations (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 SOMCH total 300 grand multipara patients out of 4539 obstretic patient were admitted from January 2008 to December 2008 giving the incidence of 6.6% and following results were found.

Table-l

Age distribution

SL No	Age in years	No. of patient n-300	percentage
1	16-20	0	0 %
2	21-25	0	0 %
3	26-30	96	32%
4	31-35	129	43%
5	36-40	60	20%
6	41->	15	5%
	Total	300	100%

Table l: Highest number of (43%) grand multipara belonged to 31-35 years.

Table-ll

Antenatal Check up

SL No	ANC	No, of patient n-300	percentage
1	Regular	45	15%
2	Irregular	57	19%
3	No	198	66%
	Total	300	100%

Table ll: Majority of the patient (66%) had no ANC.

Table- lll

Presence of risk factors during admission of patient

SL No	Risk factor	No. of patient	Percentage
1	Anaemia	280	90%
2	Pre Eclampsia	55	17.33%
3	Eclampsia	4	1.33%
4	Malpresentation	34	11.33%
5	Oligohydramnios	2	0.66%
6	Polyhydramnios	7	2.33%
7	APH	10	3.33%
8	DM	5	1.66%

Table lll: Major number of grandmultipara patient suffered from anaemia (90%), PE (17.33%) Malpresentation(11.33) APH(3.33%).

Table-lV

Mode of delivery

SL No	Mode of delivery	No of patient n-300	Percentage
1	Vaginal delivery	147	49%
2	LSCS	141	47%
3	Forceps delivery	12	4%
	Total	300	100%

Table lV: Operative intervention in the form of caesarean section was high (47%).

Table-V

Complications during delivery

SL No	Complication	no of patient	percentage
1	Prolonged Labour	68	22.67%
2	Obstructed Labour	34	11.33%
3	Retain placenta	30	10.00%
4	PPH	23	7.63%
	Total	155	51.63%

Table V: Major number of the patient suffered from Prolonged Labour (22.67%) and Obstructed Labour (11.33%), PPH (7.63%).

Table-VI

Maternal morbidity following delivery

SL No	Types of morbidity	no of patient	percentage
1	Hypertension	17	5.66%
2	Wound Infection	15	5.0%
3	Psychosis	12	4.0%
4	Retention of urine	4	1.33%
	Total	48	15.99%

Table Vl: Grandmultipara suffered from different types of morbidity such as Hypertension (5.66%), Wound Infection (5.0%), psychosis (4.0%) Retention of urine (1.33%)

Table-Vll

Foetal Status

SL No	Condition of Foetus	no of patient n-300	Percentage
1	Live birth	267	89%
2	Still birth	35	11%
	Total	300	100%

Table Vll: showed that live birth was 89% and still birth was11%

Discussion:

Grandmaultipara 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 and medical complications[1]. For cultural and religious reasons grandmaultipara is not uncommon in our country. Lack of family planning results in the ultimate increase in the number of grandmaultipara women. The present study findings were discussed and compared with previously published relevant studies.

The frequency(6.60%) of grand multipara found in this study was comparable with other studies[2-5]. This study found a higher number of these women in age group between 31-35 years (43%). This finding was consistent with the study of Saadia et al[6]. However, a higher frequency of grand multiparity in the age group >35 years has been reported by Munium et al[2] and Karim et al[7]. While Samueloff et al[8] reported the highest number of women in the age group between 30-35 years. In this study most of the patient (66%) did not receive any antenatal check up. Similar result was also found by Karim et al[7]. This study showed anaemia was 90%. 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 al[2], Saadia et al[6] and Karim et al[7].

Hypertensive disorder of pregnancy was 5.66%. This was explained by increased age of this group. The same finding were Vehaskari et al[9], Maymon et al[10] and Al-Sibia et al[11]. Antepartum haemorrhage was found in 3.33% Azziz FA[12] had reported ante partum haemorrhage significantly increased in grandmultipara. In this current study it was observed that malpresentation was 11.33%. This findings agree with the findings done by Sibai et al[11] while Vehskari et al[9].

In this study, more number of cases(47%) required caesarean section. In contrast to the study done by Munium et al[2], who found no significant difference in the prevalence rate of caesarean section or normal delivery. However, in other studies conducted by Evaldson[13], Ozumba[14] and Irvine[15] 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 22.67%, this finding co-relates with that of other studies.[13-15] This study had shown thad increased incidence of obstructed labour (11.33%) in grandmultipara. Which was consistence with other studies.[13-15,17] In this study PPH was 7.63%. This agree with the study done in Nigeria.[16]

In this study, live fetal outcome was 89%, and still birth 11%. This still birth in our study is higher compared to study by Saadia, et al[6]. It could be related to the fact that most of patients arrived late having an already intrauterine death or with hypoxic babies.

Conclusion:

Grandmultipara still had high risk pregnancy. In this study grand maultipara was also associated with adverse maternal and fetal outcomes. Most grand maultipara were 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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