

# Comparison of Malpresentation Between Multipara and Grand Multipara

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## Abstract

**Objective:** To compare the frequency of malpresentation complication between Grand multipara and multipara.

**Study design:** Descriptive Case Series.

**Place and duration of study:** Department of Gynecology & Obstetrics Allied Hospital, Faisalabad Medical University, Faisalabad. Period of study: 6 months from 6<sup>th</sup> March 2016 to 6<sup>th</sup> September 2016.

**Methodology:** After taking approval from hospital, Ethical committee all patients in OPD, antenatal ward and emergency who fulfilled inclusion criteria were enrolled in this study. Parity was recorded, based on which patients were divided into multipara/grand multipara group according to operational definition. Frequency of mal presentation noted and compared.

**Results:** Total 425 patients fulfilling inclusion and exclusion criteria were enrolled in our study. Out of these 425 patients, 16 patients had malpresentation 3.77%. Comparison between grand multipara and multipara revealed that 5(1.17%) malpresentations were noted in multipara and 11(2.59%) in grand multipara. P value was calculated as 0.03 which was significant.

**Conclusion:** Frequency of malpresentation increases as parity increases so with proper education regarding birth spacing and effective contraception this can be minimized. Keywords: Grand Multipara, Multipara and Malpresentations.

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## Introduction

Parity is defined as the number of births, both live born neonates and stillbirths, of at least 20 weeks of gestation.<sup>1</sup> The International Federation of Gynaecology and Obstetrics (1993) defines grand multiparity as delivery of the fifth to ninth viable pregnancies. Multipara is defined as a woman who has previously delivered two to four babies<sup>2</sup>.

The term grandmultipara was introduced in 1934 by Solomons who called the grandmultipara the

“Dangerous multipara”.<sup>3</sup> In developing countries incidence of grandmultiparity (GMP) is between 10%-30%.<sup>4</sup> While in developed countries grand multiparity is becoming rare 3-4% of all births.<sup>5</sup>

Malpresentation is defined as when presenting part of the fetus is other than cephalic in relation to maternal pelvis. It would be diagnosed clinically (when the part of the fetus that is lower most within the maternal pelvis is not cephalic) and on ultrasonography.

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A malpresentation is any other presentation than a vertex presentation. Approximately 3% to 4% of pregnancies at term have malpresentation.<sup>6</sup>

Grandmultiparity has been described as an independent risk factor for a variety of obstetric complications especially in developing countries with inadequate facilities.<sup>3</sup>

Intrapartum complications experienced in grandmultipara include malpresentations, abruptio placenta, fetopelvic disproportion, dysfunctional labour, uterine rupture, instrumental delivery and increased incidence of operative delivery.<sup>4</sup> Our study addressed only one of these complications that is malpresentation. The rate of malpresentations is 5.5% and in multiparous woman and the incidence of malpresentations in grandmultipara compared with multipara is 9% vs 2%.<sup>2</sup> Malpresentations are common in women of high parity and carry risk of uterine rupture if the labour is allowed to continue<sup>5</sup>.

Grandmultiparity is a high-risk pregnancy with complications such as malpresentation due to lacks abdominal wall and more rounded intra uterine space.

The pregnancy complications are highly related to parity and continue to be of interest to obstetricians. Pregnancies in grandmultiparae have been considered risky for many decades.

## Methodology

The study was conducted in department of Gynecology & Obstetrics Allied Hospital, Faisalabad Medical University, Faisalabad from 6<sup>th</sup> March 2016 to 6<sup>th</sup> September 2016.

### Inclusion Criteria

- All pregnant women having previously two or more babies presenting between 37-41 weeks of gestation.

### Exclusion Criteria

- Women with multiple pregnancies
- Malpresentations due to placenta praevia and fibroid uterus

**Data Collection Procedure:** After taking approval from hospital ethical committee, 425 patients in OPD, antenatal ward, and emergency who fulfilled the inclusion criteria were included in the study and informed consent taken. Parity was recorded, based on which patients were divided into multipara and grandmultipara groups according to an operational definition. Initial evaluation of the patients was done by taking a detailed history and clinical examination including general physical examination and per

abdominal. Malpresentation was diagnosed clinically (when the part of the fetus that is lower most within the maternal pelvis is other than cephalic) and confirmed on ultrasonography. Patients were followed till the time of delivery for the outcome. Data was collected on specially designed proforma.

## Results

This study was conducted in the department of Gynaecology and Obstetrics, Allied hospital, Faisalabad. A total of 425 cases fulfilling the inclusion/exclusion criteria were enrolled to compare the frequency of intrapartum maternal complications between grandmultipara and multipara in terms of malpresentations.

Age distribution of the patients was done which shows that 239(56.24%) were between 18-30 years and 186 (43.76%) were between 31-40 years of age, mean $\pm$ SD was calculated as 29.16 $\pm$ 5.68 years. (Table No. I)

**Table I: Age Distribution (n=425)**

Age (in years)	No. of patients	%
18-30	239	56.24
31-40	186	43.76
<b>Total</b>	<b>425</b>	<b>100</b>
<b>Mean<math>\pm</math>SD</b>	29.16 $\pm$ 5.68	

Gestational age of the patients was calculated which shows that 287(67.53%) were between 37-39 weeks and 138(32.47%) were between 40-41 weeks of gestation, mean $\pm$ SD was calculated as 38.89 $\pm$ 2.65 weeks. (Table No. II)

**Table II: Gestational Age(n=425)**

Gestational age (in weeks)	No. of patients	%
37-39	287	67.53
40-41	138	32.47
<b>Total</b>	<b>425</b>	<b>100</b>
<b>Mean<math>\pm</math>SD</b>	38.89 $\pm$ 2.65	

Parity distribution was presented in Table No. 3, where 263(61.88%) were multipara and 162(38.12%) were grand multipara, mean $\pm$ SD was calculated as 4.11 $\pm$ 1.54 paras. (Table No. III)

**Table III: Parity Distribution (n=425)**

Parity	No. of patients	%
Multipara	263	61.88
Grand Multipara	162	38.12
<b>Total</b>	<b>425</b>	<b>100</b>
<b>Mean<math>\pm</math>SD</b>	4.11 $\pm$ 1.54	

Comparison of intrapartum maternal complications between grandmultipara and multipara reveals

5(1.17%) malpresentation in multipara and 11(2.59%) in grandmultipara, p value was calculated as 0.03. (Table IV)

**Table IV: Comparison of malpresentation between grandmultipara and multipara (n=425)**

Complications	Multipara		Grand Multipara		P value
	No. of patients	%	No. of patients	%	
Mal-presentation	5	1.17	11	2.59	0.03

## Discussion

Grandmultiparity is a burning issue faced by developing countries like ours where there is lack of education and antenatal care. There is a need to highlight the importance of risks of grandmultiparity by creating awareness in women and educating them regarding birth spacing and use of contraception.<sup>7</sup> So the rationale of my study is to explore these complications so that these problems can be managed timely during intrapartum period and reducing the fetomaternal morbidity and mortality.

In our study, 239(56.24%) patients were between 18-30 years and 186(43.76%) patients were between 31-40 years of age, mean $\pm$ SD was calculated as 29.16 $\pm$ 5.68 years, frequency of intrapartum maternal complications among multiparous women reveals that 16(3.77%) had malpresentation. Comparison of intrapartum maternal complications between grandmultipara and multipara revealed that 5(1.17%) patients having malpresentation were multipara and 11(2.59%) were grandmultipara, p value was calculated as 0.03.

These findings are in accordance with a study showing the rate of malpresentations is 5.5% and the incidence of mal-presentations in grandmultipara compared with multipara is 9% vs 2%.<sup>8,9</sup>

Malpresentations are common in women of high parity and some carry risk of uterine rupture if the labour is allowed to continue.<sup>10</sup> That's why cesarean section is increased in grand multipara same was shown in the study conducted in Kolkata in 2017.

One study grand multiparity has twice risk of malpresentation and it was comparable with our study.<sup>11</sup>

There is a need to highlight the importance of risks of grand multiparity by creating awareness in women and educating them regarding birth spacing and use of contraception.<sup>12</sup> So the rationale of my study is to

explore these complications so that these problems can be managed timely during intrapartum period and reducing the fetomaternal morbidity and mortality.<sup>13</sup>

Our study concluded that in the modern setting with adequate health care, properly trained nursing staff & doctors and well-designed protocols, grandmultiparity is not associated with a significantly increased risk of the classic complications traditionally associated with it and there should be no difference between the outcome of grandmultiparous and multiparous pregnancies in a developing country provided that adequate health care is available.<sup>14</sup>

## Conclusion

Frequency of malpresentation increases as parity increases so with proper education regarding birth spacing and effective contraception this can be minimized.

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