



ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

EFFECT OF PARITY ON TYPE OF LABOUR, POSITION OF OCCIPUT, DURATION OF SECOND STAGE AND MODE OF DELIVERY.

KEY WORDS: Parity, Labour, Position Of Head, Duration of Labour.

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ABSTRACT

Labour is the process that begins with the onset of regular uterine contractions that cause cervical dilation and fetus to descend through the birth canal and ends with delivery of newborn and expulsion of placenta. **Background:** To evaluate effect of parity on type of labour, position of occiput, duration of second stage and mode of delivery as it has an impact on proper patient management. **Methods:** At term proper history was taken, per abdominal and per vaginal examination was done after proper consent. Parity, presentation, cervical dilation, effacement, position of os, station and position of occiput was noted. After full cervical dilation length of second stage and mode of delivery was noted. **Conclusion:** Majority of primigravida had induced labour while as majority multigravida had spontaneous labour, the duration of second stage of labour was more in primigravida than multigravida and mode of delivery with spontaneous vaginal delivery SVD being more in multigravida than primigravida.

INTRODUCTION

Gravidity is defined as the number times a pregnant female has conceived, primigravida is the one conceived for the 1st time and multigravida more than once, and parity is defined as the number of times she has given birth beyond the age of viability irrespective of the outcome. Nulliparous is the one who has never given birth and multiparous given birth more than once.¹ Labour is the process that begins with the onset of regular uterine contractions that cause cervical dilation and fetus to descend through the birth canal and ends with delivery of newborn and expulsion of placenta and is divided into three stages

First stage of labour:

It begins when spaced uterine contractions of sufficient frequency, intensity and duration are attained to bring cervical effacement and ends when cervix is fully dilated. It is the stage of cervical effacement and dilation.

Second stage:

begins when cervix is fully dilated and ends with the delivery of fetus.

Third stage:

stage of placental separation and expulsion.² In cephalic presentation with vertex as a presenting part the occiput of the fetal head determines the position. In Occipito Anterior OA position occiput faces towards pubic symphysis, and in midway between sacrum n pubic symphysis its Occipito Transverse OT. If occiput is between the ischial spines and the symphysis, it is called either a right or left occiput anterior.

As the occiput approaches the sacrum, it becomes either a right or left occiput posterior. When the occiput is towards sacrum the position is called direct occiput posterior.³

MATERIALS AND METHODS

The present observational study was conducted in the Postgraduate Department of Obstetrics and Gynaecology, Lalla Ded Hospital, an associated hospital of Government Medical College, Srinagar over a period of one and a half year.

Ethical clearance was obtained from the Institutional Ethical

Committee.

Inclusion Criteria

1. Full term pregnancy >37 weeks.
2. Singleton pregnancy.
3. Cephalic presentation.
4. Primi or Multi.
5. No contraindication to NVD.

Exclusion Criteria

1. Preterm <37 weeks pregnancy.
2. Multiple fetus.
3. Any malpresentation [breech, brow, face].
4. Previous scar [LSCS].
5. Any contraindication to NVD.

At term proper history was taken, per abdominal and per vaginal examination was done after proper consent. Parity, presentation, cervical dilation, effacement, position of os, station and position of occiput was noted. After full cervical dilation length of second stage and mode of delivery was noted.

RESULTS AND OBSERVATIONS

A total of 400 patients were included in our study over a period of 18 months.

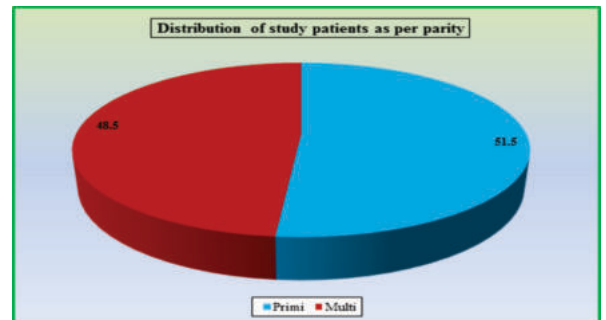


Figure 1. Distribution of study patients as per parity.

Table 1: Distribution of study patients as per parity

Parity	Number	Percentage
Primi	206	51.5

Multi	194	48.5
Total	400	100

Table 1: 51.5% of our study patients were primigravida and 48.5% were multigravida.

Table 2: Patients were segregated into four age groups 20-24, 25-29, 30-34 and ≥35 years having different percentage of multigravida and primigravida patients as mentioned above.

Table 2: Age distribution of study patients

Age (Years)	Primi		Multi		P-value
	No.	%age	No.	%age	
20-24	16	7.8	2	1.0	<0.001*
25-29	172	83.5	74	38.1	
30-34	16	7.8	85	43.8	
≥ 35	2	1.0	33	17.0	
Total	206	100	194	100	
Mean±SD	26.8±2.14		30.7±3.74		

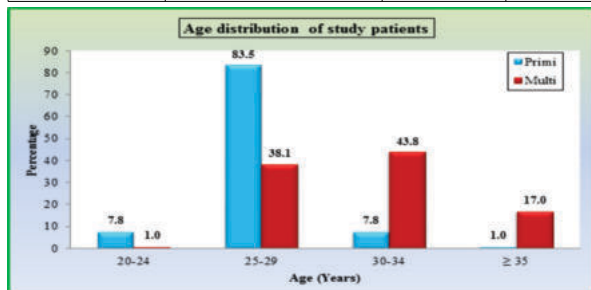


Figure 2. Age distribution of study patients.

Table 3: Distribution of study patients as per position of occiput

Position of occiput	Primi		Multi		P-value
	No.	%age	No.	%age	
Occiputo Anterior	174	84.5	172	88.7	0.351
Occiputo Posterior	20	9.7	16	8.2	
Occiputo Transverse	12	5.8	6	3.1	
Total	206	100	194	100	

No significant correlation was found between parity and position of occiput (p 0.351).

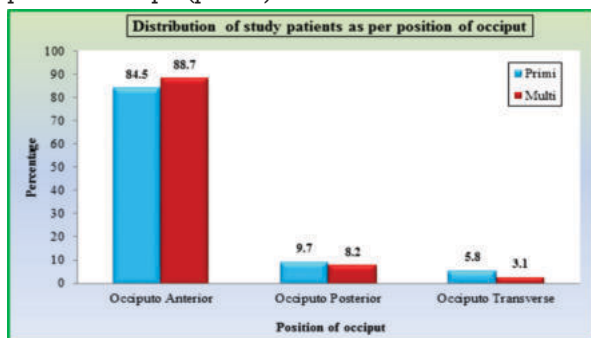


Figure 3. Distribution of study patients as per position of occiput.

*Statistically Significant (P-value<0.05)

Table 4: Duration of second stage of labour among study patients

Duration of second stage (Minutes)	Primi		Multi		P-value
	No.	%age	No.	%age	
< 30	62	30.1	110	56.7	<0.001*
30-60	107	51.9	69	35.6	

≥ 60	37	18.0	15	7.7
Total	206	100	194	100

Table 4: Statistically significant correlation was observed between parity and the duration of second stage of labour (p < 0.00)

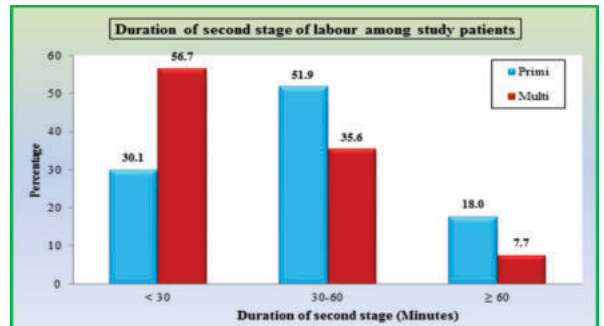


Figure 4. Duration of second stage of labour among study patients

Table 5: Mode of delivery among study patients

Mode of delivery	Primi		Multi		P-value
	No.	%age	No.	%age	
SVD	164	79.6	169	87.1	0.011*
IVD	18	8.7	18	9.3	
CS	24	11.7	7	3.6	
Total	206	100	194	100	

Significant (P-value<0.05)

Table 5: Significant correlation was found between parity and mode of delivery with SVD being more in multi (87.1%) than primi (79.6%) and operative delivery more in primi (20.4%) than multi (12.9%).

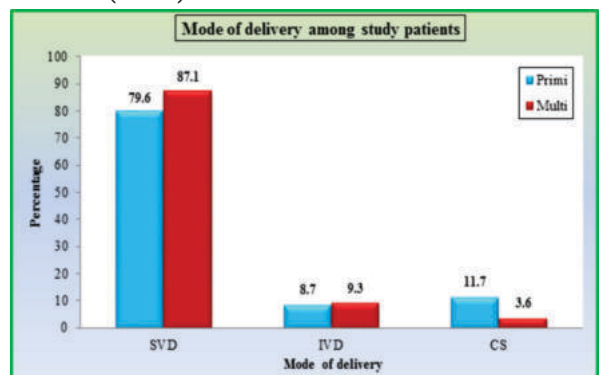


Figure 5. Mode of delivery among study patients.

DISCUSSION

The second stage of labour is very important because it is associated with increased maternal and perinatal morbidity and mortality. A total of 400 patients were included in our study over a period of 18 months. Patients were segregated according to parity and different age sets. 206 were primigravida and 194 multi gravida with mean age being (26.8±2.14)year and (30.7±3.74)year respectively.

We analyzed the factors influenced by parity in this study, significant correlation was noted between parity and type of labour (p value <0.001). 51.5% primi had induced labour and 48.5% had spontaneous labour while as 69.6% multi had spontaneous labour and 30.4% had induced labour.

Statistically significant correlation was observed between parity and the duration of second stage of labour (p < 0.001) and mode of delivery with spontaneous vaginal delivery SVD being more in multi (87.1%) than primi (79.6%) and operative

delivery more in primi (20.4%) than multi (12.9%).

No significant correlation was found between parity and position of occiput (p value 0.351). Similar results were found in a study by **Kanmani M**⁴ where he studied factors influenced by the parity. Significant correlation was noted between parity and type of labor, second stage duration, and mode of delivery MOD (p=0.001). No significant correlation was found between parity and position (p=0.170).

CONCLUSION

We analyzed the factors influenced by parity and concluded that majority of primigravida had induced labour while as majority multigravida had spontaneous labour, the duration of second stage of labour was more in primigravida than multigravida and mode of delivery with spontaneous vaginal delivery SVD being more in multigravida than primigravida. No significant correlation was found between parity and position of occiput.

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