



MATERNAL MORBIDITIES AFFECTED BY MATERNAL AGE IN TERM DELIVERIES

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ABSTRACT **Objectives**— To determine maternal morbidity rates by maternal age.
Study Design— This was Prospective Study in Department of Obstetrics & Gynaecology Zenana Hospital, SMS Medical College, Jaipur from March 2015 to February 2016. maternal age was categorized in to 3 groups 19-23years,24-28yrs,29+ yrs . Rates of maternal outcome by maternal age were compared . Sample size was calculated to 600 subjects .
Results— In our study ,maternal morbidities were seen more in 29+yrs group. 88 out of 168 (52.38%) deliveries in 29+ys group was by LSCS.PPH was seen in 0.83% of patients in 29+yrs group.0.66% genital tract injuries were seen in 29+yrs group.
Conclusion— This study demonstrates that maternal age remains a predictor of maternal morbidities. Further studies are needed in this regard in order to establish a perfect correlation between maternal morbidities and maternal age.

KEYWORDS :

Introduction –

Having a baby late in life is now an accepted norm in Industrial societies.¹ Developments in contraception and obstetric care as well as greater equality in the workplace have shifted the age distribution of the female population of reproductive age and influenced the timing of childbearing in these communities.² Traditionally, these advanced maternal age women are considered to have higher incidence of obstetric complications and adverse pregnancy outcomes than younger pregnant women.¹ Some controversy still exists in the literature on the pregnancy outcomes at advanced maternal age, some researchers² have suggested compromised pregnancy outcome; others have reported comparable outcome for this subgroup³.

The objective of the present study was to assess the impact of maternal age on maternal outcomes in term deliveries.

Material and Method:

Study design – prospective study

Place of study – department of obstetrics & gynaecology, zenana hospital, sms medical college, Jaipur, Rajasthan.

Duration of study – march 2015 to February 2016

Sample size – sample size was calculated to 592 at alpha error 0.05 & study power 80% hence for study purpose 600 subjects were taken in each of two groups.

Inclusion criteria

- gestational age 37 wks to 40 wks 6 days
- Spontaneous labour
- Premature rupture of membrane
- Previous two caesarean
- No recorded indication
- Any planned caesarean, eg. Breech, transverse lie

Exclusion criteria

- Aph
- Multiple pregnancy
- Iugr
- Congenital anomalies
- Medical illness
- Decreased fetal movements

Methodology

Prospective study of women admitting in labour room with gestational age between 37 wks to 40 wks and 6 days at zenana hospital, sms medical college, jaipur was conducted. Exclusion and inclusion criteria applied. Gestational age estimated by lmp or first usg. Mode of deliveries identified. Data of maternal outcomes were compared, correlated and

statistically analyzed. Chi-square test was used to assess statistical significance of association. P-value < 0.05 was considered as statistically significant.

Results: 600 subjects were recruited on the basis of inclusion and exclusion criteria. A form was completed for each subjects, a detailed medical and obstetric history taken, clinical examination and routine antenatal investigations and USG done. Data of maternal outcomes were compared, correlated and statistically analyzed.

Salient features of this study were: -The urban population constituted major part of study population (68.67%). Majority of study population belonged to middle class (71.67%) and maximum cases were Hindu (83%). Majority of cases could read and write (70%).

Observation

Table – 1 - Distribution According to maternal age

Age group (in yrs)	No.	%
19-23	200	33.33%
24-28	232	38.67%
29+	168	28%
TOTAL	600	100%

Table-2-Distribution of According to mode of deliveries

Age group (in yrs)	Mode of deliveries			P-VALUE
	Vaginal deliveries	LSCS	total	
19-23	108 (18%)	92 (15.33%)	200 (33.33%)	P-VALUE >0.05 NS
24-28	134 (22.33%)	98 (16.33%)	232 (38.67%)	
29+	80 (13.33%)	88 (14.67%)	168 (28%)	
TOTAL	322 (53.66%)	278 (46.34%)	600 (100%)	

TABLE-3 - Distribution of According to PPH

Age group (in yrs)	PPH			P-VALUE
	PRESENT	ABSENT	Total	
19-23	3 (0.5%)	197 (32.83%)	200 (33.33%)	P-VALUE >0.05 NS
24-28	1 (0.17%)	231 (38.5%)	232 (38.67%)	
29+	5 (0.83%)	163 (27.16%)	168 (28%)	
TOTAL	9 (1.5%)	591 (98.5%)	600 (100%)	

TABLE-4 - Distribution According to MATERNAL GENITAL TRACT INJURIES

Age group (in yrs)	GENITAL TRACT INJURIES			P-VALUE
	present	absent	total	
19-23	1 (0.17%)	199 (33.16%)	200 (33.33%)	P-VALUE >0.05 NS
24-28	1 (0.17%)	231 (38.5%)	232 (38.67%)	
29+	4 (0.66%)	164 (27.33%)	168 (28%)	
TOTAL	6 (1.00%)	594 (99%)	600 (100%)	

DISCUSSION: In our study , 33.33%mothers were between 19-23 yrs of age,38.67% mothers were between 24-28 yrs of age, 28% mothers were between 29+ yrs of age.

More LSCS were observed more in 29+ (52%of the group)yrs of age group. Jean Dupont Kemfang Ngowa et al (2013)⁴reported higher rate of cesarean section among advanced maternal age women (38,5%) than their younger counterparts(13,5%).). Blomberg M et al (2014)⁵ reported that The likelihood of normal vaginal births decreased; induced labour, instrumental deliveries and CS increased with increasing age. PPH was observed more in 29+ (0.83%)yrs of age group. Blomberg M et al (2014)⁵ reported that The risk of perineal laceration increased moderately whereas the risk of PPH >1000 mL in vaginal births was more in women of more than 29years of age. Jean Dupont Kemfang Ngowa et al (2013)⁴ reported Older women had increased incidence of postpartum hemorrhage (2.4% vs 1.2%; RR=2, p<0.05). Genital tract injuries were more in 29+ yr age group (0.66%).. Jean Dupont Kemfang Ngowa et al (2013)⁴ reported more genital tract injuries in older women.

Conclusion- Although our findings cannot show just what the mechanism is for the effect of older age on perinatal outcomes they do highlight the importance of further research in this area so that women/couples who delay their first pregnancy are fully informed about potential consequences and how best to avoid them. Further studies are needed in this regard in order to establish a perfect correlation between prenatal morbidities and maternal age.

References

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