DOI: http://dx.doi.org/10.18782/2320-7051.5425

ISSN: 2320 – 7051

Int. J. Pure App. Biosci. 5 (5): 1004-1012 (2017)







Health Status of Mother in Post Partum Period

S. S. Aigal^{1*} and S. Itagi²

¹Department of Food science and Nutrition, ²Department of Human Development and Family Studies, College of Rural Home Science, University of Agricultural Sciences, Dharwad, 580005

*Corresponding Author E-mail: sonalaigal@gmail.com

Received: 12.08.2017 | Revised: 18.09.2017 | Accepted: 24.09.2017

ABSTRACT

Health status of the mothers in post partum period was studied residing in Dharwad taluk. Total of sixty subjects were selected for the study of which 30 subjects were those who delivered normally and other 30 subjects delivered by C – section. Results indicated that the 50 percent of the normally delivered mother's age at marriage was 15-19 yrs, while that of Caesarian delivered mothers was only 20 percent. It was found that 40 percent of normally delivered mothers became pregnant at the age of 16-20 yrs, 30 percent at age of 21-23 yrs and remaining 30 percent conceived at the age of >24yrs. Low socioeconomic status was a significant contributor for psychological distress in mothers of premature infants. Complications during last trimester of pregnancy was not experienced in normal (70%) and caesarian (66.66%) delivered mothers. Maximum of mothers took adequate rest during their pregnancy period ie., normal(76.66%) and caesarian (80%) delivery. Caesarian delivered mothers (36.66%) consumed more special foods than normal delivered mothers (30%). Maximum of normal (53.33%) and caesarian (63.33%) delivered mothers perceived their own health as normal, followed by 36.66 percent each for both delivered mothers. The results indicated that 100 percent of caesarian and 76.66 percent of normally delivered mothers practiced regular check up during pregnancy and lactation. Interestingly, it was found that 100 percent of both delivered mothers took TT injections during pregnancy and lactation. There was a negative correlation between age at marriage and miscarriages.

Key words: Post partum, Pregnancy, Lactation, Caesarian, Health, Delivery

INTRODUCTION

Throughout the world, pregnancy and lactation are considered vulnerable periods for both the mother and the child. The role of maternal health and nutrition has been emphasized by the recognition of the problem of low birth weight which affects some 20 million newborns annually, mainly in developing

countries. Malnutrition in pregnancy not only has an ill effect on the newborn, but also impairs the mother's owns health. When the pregnant woman's diet does not supply the required nutrients for her needs and for those of the fetus, the fetal requirements are met by withdrawing these from the tissues of the pregnant mother.

Cite this article: Aigal, S.S. and Itagi S., Health Status of Mother in Post Partum Period, *Int. J. Pure App. Biosci.* **5(5):** 1004-1012 (2017). doi: http://dx.doi.org/10.18782/2320-7051.5425

ISSN: 2320 - 7051

This tissue depletion weakens the mother and increases the probability of serious complications and the chances of delivering an infant with low birth weight (LBW) who is unlikely to feed adequately early in life.

Pregnancy is a demanding physiological state. Postpartum women experience changes in their physiological and psychological function as they adapt to their parenting role. In India, it is observed that diets of women from the low socioeconomic groups are essentially similar during pre pregnant, pregnant and lactating periods. Consequently, there is widespread maternal malnutrition leading to high prevalence of low birth weight infants and very high maternal mortality. foods are required to improve weight gain in pregnancy (10-12 Kg) and birth weight of infants (about 2.5 Kg). It is hence important to ensure provision of extra food and healthcare to pregnant and lactating women. Thus the present investigation was conducted with an objective to know the health status of women during post partum period and to know the impact of age at marriage on the health status of women who have delivered normally or by caesarian.

MATERIALS AND METHODS

Sample selection – The mothers who have undergone normal delivery (n=30) and caesarian delivery (n=30) were selected for the study. Total of 60 (N) subjects residing in Dharwad taluk were interviewed.

Tools used – Self structured questionnaire was used to interview the respondents belonging to age group between 24-36yrs. Information to elicit the health status of mother in post partum period was also assessed.

Statistical analysis- SPSS software was used to interpret the data. Frequencies and correlation methods were used to interpret the data.

FINDINGS

Table	1: Socioeconomic status of the	he mothers	in post partum	period	N=60	
		Nori	naldelivery		ian delivery	
Sl.no	Parameters	n=30		n=30		
51.110	rarameters	n	%	n	%	
1.		Ag	e of subjects			
a.	24 -26 yrs	9	30.00	4	13.33	
b.	27- 29 yrs	9	30.00	7	23.33	
c.	30-36 yrs	12	40.00	19	63.33	
2.			Education			
a.	2^{nd} th $2 - 5$ std	9	30.00	3	10.00	
b.	7 - 10th	13	43.30	5	16.66	
c.	12 - degree	8	26.60	22	73.33	
3.	Occupation					
	Employed outside home	19	63.33	22	73.33	
	Housewife	11	36.66	8	26.66	
4.			Religion			
	Hindu	26	86.66	27	90.0	
	Muslim	04	13.30	03	10.0	
5.		Marital status				
	Married	26	86.66	30	100.0	
	Divorced	01	3.33	-	-	
	Widow	03	10.00	-	_	
6.		T	pe of house			
	Owned	21	70.00	28	93.33	
	Rented	07	23.33	02	6.66	
7.		Fa	mily income			
	5000-10,000	12	40.0	07	23.33	
	11000-20,000	12	40.0	18	60.0	
	More than 20000	6	20.0	05	16.66	

Socio economic status of the mother who have delivered normally and by C- section was depicted in table 1. The age of the mother ranged between 24-36 yrs. It was found that mothers in age group of 24- 26 yrs delivered normally and by C-section were 30 and 13.33 percent respectively. Mothers between age group 27-29 yrs were 30 percent (normal and 23.33 percent delivery) (Csection). Majority of the mothers belonged to age group of 30-36 yrs where 40 percent (normal delivery) and 63.33 percent (Csection delivery)

Education level of the mothers who have studied from 2nd- 5th std was 30 and 10 percent for normal and C-section respectively. Majority of the normally delivered mothers completed their education between 7th -10th ie., 43.3 percent while 16.6 percent were Csection delivered mothers. Almost 73.33 percent of the C-section delivered mothers completed education level between 12th-Degree, whereas 26.6 percent of normally delivered mothers completed upto degree level of education. Almost 73.33 percent of the Csection delivered mothers were employed outside home while 26.6 percent of them were housewife. It was found that 63.33 percent of normally delivered mothers employed outside home while 36.66 percent were housewife.

Among the C-section delivered mothers, maximum of 90 percent belonged to Hindu religion while only 10 percent belonged to Muslim religion. In normally delivered

mothers, majority of 86.66 percent belonged to Hindu religion while 13.3 percent belonged to Muslim category. Majority of 86.66 percent of normally delivered mothers were married, 10 percent were widow and 3.33 percent were divorcee whereas 100 percent of the C- section delivered mothers were married. The normally delivered mothers stayed in owned house (70%) while 23.33 percent stayed in rented house. Majority of 90.0 percent of C-section delivered mothers stayed in owned house while 6.66 percent stayed in rented house. The family income of normally delivered mothers were 40 percent each for 5,000- 10,000 and 11,000- 20,000 respectively while only 20 percent of their family income was more than 20,000. The family income of C- section delivered mothers whose income was between 5,000-10,000 was 23.33 percent, while most of their income (60%) was between 11,000-20,000. Only 16.66 percent of their family more than 20,000. income was socioeconomic status was a significant contributor for psychological distress in mothers of premature infants. Postpartum mothers with higher psychological distress were younger, less educated, and had low household income. Most of the mothers of preterm births with psychological distress had less than secondary school education (42.0 vs. 21.7%) and a low monthly income less than 10,000/- per month (72.0 vs. 53.3%) compared to the mothers of full term infants, showing a significant difference $(p, 0.05)^6$.

Table 2: Marital status and conditions during pregnancy of mothers in post partum period N=60

Sl.no	Parameters	Normal	delivery	Caesarian deliv	ery	
		n=30		n=30		
		n	%	n	%	
l	Age at marriage					
	15-19 yrs	15	50	06	20.0	
	20-22 yrs	10	33.33	13	43.33	
	>23 yrs	05	16.66	11	36.66	
2	Age when became pregnant					
	16- 20 yrs	12	40.0	08	26.66	
	21- 23 yrs	09	30.0	06	20.0	
	> 24 yrs	09	30.0	16	53.33	
3.	No of deliveries					

Aigal ar	nd Itagi Int. J.	Pure App. Biosci.			ISSN: 2320 – 705
	Once	17	56.66	18	60.0
	Twice	07	23.33	6	20.0
	Thrice	03	10.0	6	20.0
	Four	03	10.0	-	-
4.	Visit to antenatal care during	pregnancy			
••	Yes	30	100	30	100
	No	-	-	-	-
5.	Duration of rest after delivery	•			
	2 months	04	13.33	06	20.0
	3 months	23	76.66	14	46.66
	5 months	03	10.0	10	33.33
6.	No of pregnancies				
	One	14	46.66	18	60.0
	Two	10	33.33	06	20.0
	Three	03	10.0	06	20.0
7.	Four No of abortions	03	10.0	-	-
/•	Once	06	20.0	02	6.66
	Twice	03	10.0	12	40.0
	Thrice	03	10.0	-	-
	No abortion	18	60.0	16	53.33
8.	No of miscarriages	10	00.0	10	
	Once	03	10.0	08	26.66
	Twice	06	20.0	05	16.66
	No abortion	21	70.0	17	56.66
9.	Duration of lactation				
	Upto 6m	06	20.0	07	23.33
	Upto 1 yr	10	33.33	05	16.66
	Upto 2 yr	08	26.66	12	40.0
	> 2 yr	06	20.0	06	20.0
10.	Complication during last trim	ester of pregnancy			
	Edema	06	20.0	10	33.33
	Dizziness	03	10.0	-	-
	None	21	70.0	20	66.66
11.	Adequate rest during pregnan	ncy			
	Yes	23	76.66	24	80.0
	No	07	23.33	06	20.0
12.	Special foods taken during pro				
	Special foods taken (kesar milk,	. 09	30.0	11	36.66
	nuts, fruits, fish)				
	Not taken	21	70.0	19	63.33

Table 2 depicts the marriage and pregnancy patterns of normal and C-section delivery of mothers. It was found that 50 percent of the normally delivered mother's age at marriage was 15-19 yrs, while that of Caesarian delivered mothers was only 20 percent. Mother's age at marriage of 20-22yrs was 33.33 and 43.33 percent for normal and Caesarian delivered mothers respectively. Caesarian delivered mothers whose age at marriage was >23 yrs was 16.66 percent and that of normally delivered mothers was 36.66 percent. It was found that 40 percent of normally delivered mothers became pregnant at the age of 16-20 yrs, 30 percent at age of 21-23 yrs and remaining 30 percent conceived at the age of >24yrs. In case of caesarian delivered mothers 26.66 percent became pregnant at the age of 16-20yrs, 20 percent at the age of 21-23 yrs, while maximum of 53.33 percent conceived at age of > 24yrs.

The result indicated that 56.66 percent of normal delivered and 60 percent of caesarian delivered mothers underwent delivery only once, while 23.33(normal) and 20 percent (caesarian) mothers experienced deliveries twice. Thrice deliveries were undergone for normal delivered (10%) and caesarian (20%) delivered mothers. It was found that 10 percent of the normally delivered mothers had 4 deliveries. Hundred percent of both normal and caesarian delivered mother visited the antenatal care during their pregnancy. Almost 76.66 percent of normally delivered mothers took rest for 3 months after delivery followed by 13.33 percent of them took rest for duration of 2 months and only 10 percent of the mothers took rest for 5 months after delivery. Meanwhile the 46.66 percent of caesarian delivered mothers took rest for 3 months after delivery, followed by 33.33 percent of mothers took rest for 5 months and remaining 20 percent took rest for only 2 months.

It was indicated that majority of the mothers did not undergo abortions for normal

(60 %) and caesarian (53.33 %) delivered mothers. Normal delivered mothers (20%) underwent abortion once and 10 percent each for twice and thrice abortions respectively. It was found that the 40 percent of caesarian delivered mothers had abortions twice and 6.66 percent underwent abortions once. Similarly, majority of the mothers did not experience any miscarriages ie., 70 and 56.66 percent of normal and caesarian delivery respectively. Twenty percent of the mothers who delivered normally had twice miscarriage, while 10% of mothers only one miscarriage. Caesarian delivered mothers (26.66%) had miscarriage once while only 16.66 percent had twice miscarriages. It was observed that 33.33 and 16.66 percent of both normal and caesarian delivered mothers respectively, lactated their infants upto duration of 1 yr. Duration of lactation upto 2 yr was followed by 26.66 percent of normally delivered followed by 20 percent upto 6 mothers months lactation. Twenty percent of the mothers lactated their infants for >2 yrs. delivered mothers Caesarian (23.33%)breastfed their infants upto 6 m, while 40 percent breastfed upto 2 yrs followed by 20 percent of them breastfed more than 2 yrs.

Complications during last trimester of pregnancy was not experienced in normal (70%) and caesarian (66.66%) delivered However, only 20 percent of mothers. mothers (normal delivery) experienced edema and dizziness (10%). Almost 33.33 percent of caesarian delivered mothers had complication of edema in last trimester of pregnancy. Maximum of mothers took adequate rest during their pregnancy period ie.. normal(76.66%) and caesarian (80%)delivery. It was observed that special foods such as kesar milk, nuts, fruits, fish) were not taken during pregnancy of normal (70%) and caesarian (63.33%) delivered mothers. It was found that the caesarian delivered mothers (36.66%) consumed more special foods than normal delivered mothers (30%).

Table 3: Consumption pattern of medicines taken during pregnancy by mothers in post partum period N=60

Sl.		Normaldeliv	very n=30	Caesarian d	elivery			
no	Parameters		n=30					
		n	0/0	n	%			
1.	Medicines taken during pregna	ancy						
	Iron and calcium	27	90.0	25	83.33			
	Iron, calcium and folic acid	03	10.0	05	16.66			
2.	Duration of medicine consump	otion						
	Upto 3 m	06	20.0	-	-			
	Upto 6 m	10	33.33	03	10.0			
	Upto 9 m	14	46.66	27	90.0			
3.	Source of procuring medicine	s						
	Through government	19	46.66	13	43.33			
	Private stores	11	36.66	17	56.66			

Medicines taken during pregnancy by mothers were depicted in table.3. Majority of normal delivered (90%) and caesarian (83.33%) delivered mothers consumed iron and calcium tablets during regularly during pregnancy. While iron, calcium and folic acid tablets were consumed by normal (10%) and caesarian (16.66%) delivered mothers. Almost 46.66 and

90 percent of the normal and caesarian delivered mothers respectively, consumed the tablets upto the duration of 9 months, while normal (33.33%) and caesarian (10%) delivered mothers consumed tablets for the duration of 6 months. Normal delivered mothers (20%) took tablets during pregnancy for only 3 months.

Table 4: Consumption pattern of medicines taken during lactation by mothers in post partum period N=60

Sl.no	Parameters	Normaldelivery		n=30 Caesarian delivery n=30		•	
		n	%		n	%	
1.	Medicines taken after delivery						
	Iron and calcium	20	66.66		28	93.33	
	Iron, calcium & folic acid	03	10.0		-	-	
	Not taken	07	23.33		02	6.66	
2.	Duration of medicine consumption						
	Upto 1m	14	46.66		05	16.6	
	Upto 3m	09	30.0		23	76.66	
	Not taken	07	23.33		02	6.66	

Medicines taken during lactation by mothers were depicted in table.4. Majority of normal delivered (66.66%) and caesarian (93.33%) delivered mothers consumed iron and calcium tablets during regularly during lactation. While iron, calcium and folic acid tablets were consumed by normal (10%). It was observed that 23.33 percent of normal and 6.66 percent of caesarian delivered mothers did not consume tablets at all during lactation. Almost

46.66 and 16.6 percent of the normal and caesarian delivered mothers respectively, consumed the tablets upto the duration of 1 month, while normal (30%) and caesarian (76.66%) delivered mothers consumed tablets for the duration of 3 months. Normal delivered mothers (23.33%) and caesarian delivered mothers (6.66%) did not take tablets during lactation.

Table 5: Complications experienced by the mothers during delivery

	able 5: Complications experi				•	N=60
Sl.no	Parameters	Normal do	elivery	(n=30)	Caesarian delivery	
					(n=30)	
		n	%	r	1	%
1.	Complications during deliv	ery				
	1 Vaginal tear	06	20.0	()	-
	2 vaginal tear	06	20.0	()	-
	Prolonged labor(>12hr)	03	10.0	()	-
	Bleeding	03	10.0	()	-
	None	12	40.0	3	30	100
2.	Time of delivery					
	Before completion of 9	06	20.0	(05	16.66
	month					
	After completion of 9	24	80.0	2	25	83.33
	month					
3.	Weight of child					
	Below 2.5 kgs	12	40.0	(07	23.33
	Above 2.5 kgs	18	60.0	2	23	76.66
4.	Mother's perception on infa	nt's health	upto 1 year			
	Good	14	40	6.66	12	40.0
	Normal	07	2:	3.33	11	36.66
	Sick	09	30	0.0	07	23.33
5.	Mother's opinion about ow	n health				
	Good	11	30	6.66	11	36.66
	Normal	16	53	3.33	19	63.33
	Sick	03	10	0.0	-	-

The complications during delivery were recorded for both normal and caesarian delivered mothers (table 5). It was found that normal delivered mothers experienced 1 vaginal tear (20%), 2 vaginal tear (20%) during delivery, prolonged labor (>12hr) of 10 percent, bleeding (10%) and 40 percent of mothers did not have any complications during the delivery process. Time of delivery was also considered where it showed that majority of deliveries happened after completion of 9 months for normal (80%) and caesarian (83.33%) delivered mothers. However, only 20 and 16.66 percent of normal and caesarian delivered mothers respectively, delivered before the completion of 9 months.

The weight of the child was found to be above 2.5 kgs in both normal (60%) and caesarian (76.66%) delivered mothers. Whereas 40

percent of normally delivered and 23.33 percent of caesarian delivered mother's infant weight at birth was below 2.5 kgs. Mother's perception on infant's health upto 1 yr was good in normal (46.66%) and caesarian (40%) delivery, while 36.66 and 23.33 percent of caesarian and normal delivered mothers respectively perceived that their infant's health upto 1 yr was normal. Normally delivered mothers (30%) perceived that their infant's health was sick upto 1 yr, and 23.33 percent of caesarian delivered mothers perceived their infant's health was sick. Maximum of normal (53.33%) and caesarian (63.33%) delivered mothers perceived their own health as normal, followed by 36.66 percent each for both delivered mothers. Only 10 percent of normal delivered mothers perceived their own health as sick.

Table 6: Practice followed by the mothers during pregnancy and lactation period N=60

Sl.no	Parameters	Normal del	livery (n=	,	n delivery n=30)	
		n	%	n	%	
1.	1. Practice followed during pregnancy and lactation					
	Regular check up done	23	76.66	30	100	
	Take TT injection taken	30	100	30	100	
	Eat balanced diet	13	43.33	17	56.66	
	Take adequate rest	14	46.33	13	43.33	
	Stay neat & clean	30	100	30	100	

Various practices were considered which were followed by the mothers during pregnancy and lactation (table 6). The results indicated that 100 percent of caesarian and 76.66 percent of normally delivered mothers practiced regular check up during pregnancy and lactation. Interestingly, it was found that 100 percent of both delivered mothers took TT injections during pregnancy and lactation. Consumption

of balanced food was high in caesarian delivered mothers (56.66%) than normally delivered mothers (43.33%). Adequate rest was taken during pregnancy & lactation by only 46.33 percent of normal and 43.33 percent of caesarian delivered mothers. All the mothers stayed neat and clean during pregnancy and lactation.

Table 10: Correlation of age at marriage of mothers with occurrence of miscarriages

Correlations

		age at marriage	miscarriage
age at marriage	Pearson Correlation	1	431
	Sig. (2-tailed)		.017
	N	30	30
miscarriage	Pearson Correlation	431	1
	Sig. (2-tailed)	.017	
	N	30	30

^{*.} Correlation is significant at the 0.05 level (2-tailed).

Age at marriage was correlated with no of miscarriages (table 10). The results indicated that there was negative correlation between age at marriage and miscarriages. As the age at marriage decreases the rate of miscarriages decreases. The women who got married at very early age were more susceptible to miscarriages due to repeated pregnancies, insufficient body stores and various physiological factors.

CONCLUSION

The study concluded that almost 50 percent of the women who underwent normal delivery got married at early age (15- 19yrs), hence were susceptible to miscarriages (30%). There was a negative correlation between age at marriage and miscarriages. In both groups, the health status of both mother & infant was good, had adequate rest, took medications (iron & calcium) regularly in turn resulting in good body weight of the infant at birth. There was a positive correlation of balanced food on health status of women. Women who consumed a healthy diet had a good health status.

REFERENCES

1. Adams, S.S., Eberhard-Gran, M. and Eskild, A., Fear of childbirth and duration

- of labour: a study of 2206 women with intended vaginal delivery. *Inter J of Obstetrics and Gynaecology*, **119(10):** 1238-46 (2012).
- 2. Beaton, J. and Gupton, A., Childbirth expectations: A qualitative analysis. *Midwifery* **6:**133–9 (1990).
- 3. Bener, Psychological distress among postpartum mothers of preterm infants and associated factors: a neglected public health problem. *Revista Brasileira de Psiquiatria* **35:** 231–236 (2013).
- Chaillet, N. and Dumont, A, Evidence-based strategies for reducing cesarean section rates: a meta-analysis, *PubMed* DOI: 10.1111/j.1523X.2006.00146.x, PMID: 17324180 (2006).
- 5. Goldenberg, R.L., Culhane, J.F., Iams, J.D and Romero R., Epidemiology and causes of preterm birth. *Lancet*. **371:** 75-84 (2008).
- Halpern, L.F., Brand, K.L. and Malone A.F., Parenting stress in mothers of verylow-birth-weight (VLBW) and full-term infants: a function of infant behavioral characteristics and child-rearing attitudes. *J Pediatr Psychol* 26: 93-104 (2001).

- Holditch-Davis, D., Miles, M.S., Weaver, M.A., Black, B., Beeber, L and Thoyre, S., Patterns of distress in African-American mothers of preterm infants. *J Dev Behav Pediatr* 30:193-205 (2009).
- 8. Horey, D., Weaver, J and Russell, H., Information for pregnant women about caesarean birth; *Cochrane Database Syst Rev. Pract Midwife.*;1: DOI:10.1002/14651858.CD003858.pub2 CD003858 (2004).
- 9. Nelson, D.R., Hammen, C., Brennan, P.A and Ullman, J.B., The impact of maternal depression on adolescent adjustment: the role of expressed emotion. *J Consult Clin Psychol* **71:** 935-44 (2003).
- 10. National Collaborating Centre for Women's and Children's Health (UK), Intrapartum Care: Care of Healthy Women and their Babies during Childbirth *PubMed* NICE Clinical Guidelines, London: *RCOG Press.* **55**: (2007).
- 11. Ukpong, D. I., Fatoye, F.O., Oseni, S.B, and Adewuya, A.O., Post partum emotional distress in mothers of preterm infants: a controlled study. *East Afr Med J.* **80:** 289-92 (2003).