



**“EVALUATION OF EFFECTIVENESS OF 'ESSENTIAL POSTNATAL CARE' INSTRUCTIONAL PACKAGE, GIVEN TO MOTHERS AND THEIR CARE GIVERS”**

**KEYWORDS**

'Essential Postnatal Care' Instructional Package, primiparous postnatal mothers, care givers, postnatal maternal health outcome, infant health outcome.

**Mrs.Afsana Ismail Mulani Msc.(N)**

Clinical Instructor (Dept. of Obstetrics & Gynecological Nursing) Corresponding Author

**Mrs. Sheetal Samson CP, Msc.(N)**

Associate Professor (Dept. of Obstetrics & Gynecological Nursing)

**ABSTRACT**

**Abstract:** Safe motherhood aims at enhancing the quality of a life and women through the adoption of a combination of health and non-health strategies for postnatal self care and care of the infant. Objectives: To assess the postnatal maternal and infant health outcomes in experimental and control group. To evaluate the effectiveness of instructional package on postnatal maternal and infant health outcomes. To determine the correlation between postnatal maternal and infant health outcomes. To find an association of postnatal maternal and infant health outcomes with selected demographic variables. MATERIALS AND METHODS- a comparative cum evaluative approach. Sixty dyads of primiparous postnatal mothers and their caregiver **Results:** Maternal health outcome in the experimental group reveal that maximum 29(96.6%) mothers had good maternal health outcome, 1(3.33%) had average health outcome and none had poor health outcome. As for results of infant health outcome, in the experimental group, maximum 27(90%) infants had good health outcome, 3(10%) had average health outcome and none had poor health outcome. Maternal health in the control group 17(56.6%) postnatal mothers had good health outcome, 6(20%) had average health outcome and 7(23.3%) had poor health outcome. In the same group, results of infant health outcome reveal that 15(50%) infants had good health outcome, 8(26.6%) had average health outcome and 7(23.3%) had poor health outcome when assessed on the 7th postnatal day after discharge. **CONCLUSION-** it is concluded that the Essential postnatal instructional package on postnatal care and infant care was effective.

**Introduction:** Postnatal period is the period beginning immediately after the birth of a child and extending for about six weeks. Biologically, it is the time after birth, a time in which the mother's body, including hormone levels and uterus size, return to pre-pregnant states. The major focus of postpartum care is ensuring that the mother is healthy and capable of taking care of her new born; equipped with all the information she needs about breast feeding, reproductive health and the imminent life adjustment. In some case this adjustment is not made easily and women may suffer from postpartum depression, post traumatic stress disorder or even puerperal psychosis. So the women need to be taken care properly during postnatal period. The physical care women receive during postnatal period can influence her health for the rest of her life.1

**Materials and Methods:**

The research approach used for the study was comparative cum evaluative approach. The conceptual framework was based on Wiedenbach's Prescriptive Theory. The study was conducted using a post test only control group design. Sixty dyads of primiparous postnatal mothers and their caregiver receiving services at postnatal ward of Krishna Hospital Karad were assigned randomly to experimental and control group using lottery method after obtaining required informed consent. Instructional package was given to the mother-caregiver dyad in the experimental group and routine health education to the control group before discharge from hospital. Data related to the health outcome of mother and infant was collected on 7th day after discharge at client's residence by using semi-structured interview schedule and health outcome assessment checklist. Other tools used were Breast Engorgement Scale, Numerical Pain Rating Scale, Edinburg's Postnatal Depression Scale .Postnatal assessment and infant assessment was done using, standardized weight machines for measuring mother and infant weight, standard Hicks company new clinical thermometer to measure temperature, standardized BP apparatus to measure blood pressure of the mother. Various extraneous variables analyzed for the study were age, education, residence, type of family, occupation, religion income of the family per month, area of residence, relationship of caregiver with postnatal mother, availability of separate room for postnatal mother and baby. The data were collected tabulated and analyzed in terms of objectives of the study, using descriptive and inferential statistics.

**Table No1: Frequency and percentage distribution of postnatal mothers according to levels of maternal health outcome and infant health outcome in experimental group and control group n=30 per group**

Health outcome	Experimental group	Control group					
		Good	Average	Poor	Good	Average	Poor
Maternal health outcome	29(96.6%)	1(3.33%)	0	17(56.6%)	6(20%)	7(23.3%)	
Infant health outcome	27(90%)	3(10%)	0	15(50%)	8(26.6%)	7(23.3%)	

Table: 1 reveals that with regards to maternal health in the control group 17(56.6%) postnatal mothers had good health outcome, 6(20%) had average health outcome and 7(23.3%) had poor health outcome. In the same group ,results of infant health outcome reveal that 15(50%) infants had good health outcome, 8(26.6%) had average health outcome and 7(23.3%) had poor health outcome when assessed on the 7th postnatal day after discharge.

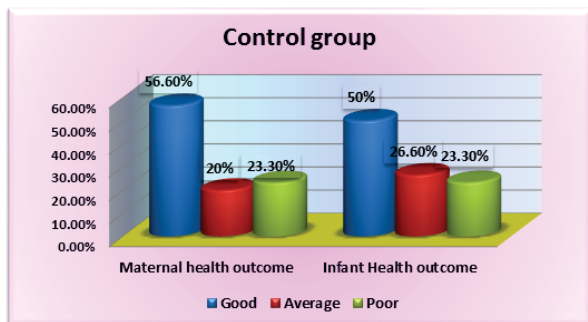
Whereas findings related to maternal health outcome in the experimental group depicted in table 1 reveal that maximum 29(96.6%) mothers had good maternal health outcome, 1(3.33%) had average health outcome and none had poor health outcome. As for results of infant health outcome, in the experimental group, maximum 27(90%) infants had good health outcome, 3(10%) had



**RESULTS-**

**Analysis of maternal and infant health outcome**

**Graph 1: Cone graph showing percentage distribution of postnatal mothers and their infant according to level of health outcome in Experimental group.**



**Graph 2: Cylinder graph showing percentage distribution of postnatal mothers and their infant according to level of health outcome in control group.**

**Table No. 2: Analysis of effectiveness of the 'Essential postnatal care instructional package' given to the postnatal mothers and their caregivers, with computation of Unpaired 't' test. n= 30 per group**

Overall Health outcome	Experimental group		Control group		Unpaired t Value	P Value
	Mean	SD	Mean	SD		
Maternal	37.46	3.32	29.06	8.77	4.903	<0.0001*
Infant	33.96	4.39	25.3	8.81	4.820	0.0003**

\* (P<0.01)=Significant, \*\* (P<0.001)=Highly significant, \*\*\* (P<0.0001)=Extremely significant, (P>0.05)=Not significant

Data in Table No.2 shows maternal health outcome score in the experimental group who was administered the essential postnatal care instructional package was significantly higher (P<0.0001) than that of the control group who received only routine health education. Similarly it is evident that the infant health outcome score in the experimental group was significantly higher (P<0.001) than that in the control group. Thus it is inferred that the 'Essential Postnatal Care instructional package was highly effective in bringing out good maternal and infant health outcomes in the experimental group.

**Table No. 3: Data showing association between postnatal MATERNAL health outcomes and selected demographic variables in experimental group and Control group**

Selected Demographic Variable and level of maternal health outcome	Experimental group	Control group	P-Value (Fisher's exact test)
<b>1 AGE OF MOTHER(years)</b>			
<b>a 18-23 yrs.</b>			
Good	18(90%)	8(50%)	0.0113*
Average/poor	2(10%)	8(50%)	
<b>b 24-28 yrs.</b>			
Good	10(100%)	11(78.5%)	0.2398
Average/poor	0(0%)	3(21.4%)	
<b>2 AGE OF CAREGIVER(years)</b>			

<b>a 23-36yrs.</b>			
Good	4(100%)	3(60%)	0.4444
Average/poor	0(0%)	2(40%)	
<b>b 37-50 yrs.</b>			
Good	22(95.6%)	14(63.6%)	0.0098**
Average/poor	1(4.3%)	8(36.3%)	
<b>c 51-65 yrs</b>			
Good	2(66.6%)	1(33.3%)	1.0000
Average/poor	1(33.3%)	2(66.6%)	
<b>3 TYPE OF FAMILY</b>			
<b>a Nuclear family</b>			
Good	8(88.8%)	7(50%)	0.0858
Average/poor	1(11.1%)	7(50%)	
<b>b Joint family</b>			
Good	21(100%)	10(62.5%)	0.0034 **
Average/poor	0(0%)	6(37.5%)	
<b>4 EDUCATION OF MOTHER</b>			
<b>a Primary</b>			
Good	3(75%)	4(33.3%)	0.2645
Average/poor	1(25%)	8(66.6%)	
<b>b Secondary</b>			
Good	13(100%)	7(63.6%)	0.0311 *
Average/poor	0(0%)	4(36.3%)	
<b>c Higher secondary</b>			
Good	12(100%)	4(80%)	0.2941
Average/poor	0(0%)	1(20%)	
<b>d Graduation</b>			
Good	2(25%)	1(100%)	0.3333
Average/poor	6(75%)	0(0%)	
<b>5 EDUCATION OF CAREGIVER</b>			
<b>a No formal education</b>			
Good	6(85.7%)	4(36.3%)	0.0656
Average/poor	1(14.2%)	7(63.6%)	
<b>b Primary</b>			
Good	23(100%)	13(68.4%)	0.0052 **
Average/poor	0(0%)	6(31.5%)	
<b>6 OCCUPATION OF MOTHER</b>			
<b>a Professional</b>			
Good	4(100%)	0(0%)	0.2000
Average/poor	0(0%)	1(100%)	
<b>b Skilled worker</b>			
Good	2(100%)	1(50%)	1.0000
Average/poor	0(0%)	1(50%)	
<b>d House wife</b>			
Good	23(95.8%)	15(57.6%)	0.0022 **
Average/poor	1(4.1%)	11(42.3%)	
<b>7 TYPE OF DIET</b>			
<b>a Vegetarian</b>			
Good	1(100%)	1(50%)	1.0000
Average/poor	0(0%)	1(50%)	
<b>b Mixed</b>			
Good	28(96.5%)	16(55.1%)	0.0004**

	Average/poor	1(3.4%)	13(44.8%)	
<b>8</b>	<b>INCOME OF THE FAMILY PER MONTH</b>			
<b>a</b>	<b>Rs.5001and above</b>			
	Good	19(100%)	8(47%)	0.0003**
	Average/poor	0(0%)	9(52.9%)	
<b>b</b>	<b>Rs.5000 and below</b>			
	Good	10(90.9%)	9(69.2%)	0.3271
	Average/poor	1(9.0%)	4(30.7%)	
<b>9</b>	<b>AREA OF RESIDENCE</b>			
<b>a</b>	<b>Urban</b>			
	Good	21(95.4%)	8(61.5%)	0.0185*
	Average/poor	1(4.5%)	5(38.4%)	
<b>b</b>	<b>Rural</b>			
	Good	21(95.4%)	9(56.2%)	0.0054**
	Average/poor	1(4.5%)	7(43.7%)	
<b>10</b>	<b>RELATIONSHIP OF CAREGIVER WITH POSTNATAL MOTHER</b>			
<b>a</b>	<b>Mother</b>			
	Good	24(96%)	15(60%)	0.0046**
	Average/poor	1(4%)	10(40%)	
<b>b</b>	<b>Other relation</b>			
	Good	5(83.3%)	2(40%)	0.2424
	Average/poor	1(4%)	3(60%)	
<b>11</b>	<b>SEPARATE ROOM AVAILABLE FOR POSTNATAL MOTHER AND BABY</b>			
<b>a</b>	<b>Yes</b>			
	Good	21(100%)	11(64.7%)	0.0045**
	Average/poor	0(0%)	6(35.2%)	
<b>b</b>	<b>No</b>			
	Good	8(88.8%)	6(50%)	0.0873
	Average/poor	1(11.1%)	6(50%)	

\*( $P < 0.01$ )=Significant, \*\*( $P < 0.001$ )=Highly significant, ( $P > 0.05$ )=Not significant

The findings in Table No. 3 reveals that the sample characteristics of age of postnatal mother between 18-23 years, age of caregiver between 37-50 years, Nuclear family type, secondary level of education in the postnatal mother, a minimum of primary level of education in the caregiver, housewife status of the mother, consumption of mixed type of diet, monthly family income of Rs.5000 and more, rural area of residence, having mother as a caregiver and availability of a separate room for postnatal mother are significantly associated ( $P < 0.01$ ) with maternal health outcome in both groups. Urban area of residence does show some association ( $P < 0.05$ ) but in comparison the rural area of residence seems to have better statistical significance at 0.01 level which the investigator assumes could be related to better commitment towards adherence to home care by the rural mothers and their caregivers who seemed extremely grateful for educating them on vital aspects of postnatal care as per the administered instructional package.

**Discussion:**

**Maternal health outcome:**

Episiotomy care related findings in the present study showed that in experimental group mothers did not have perineal wound problem but in control one mother develop perineal wound infection it confirms the need to educate the postnatal primiparas and their caregivers on teaching related to episiotomy wound care. A study2 revealed the structured teaching program on episiotomy care was effective in increasing the knowledge on episiotomy care at the level of  $P < 0.5$  in the experimental group. **Effectiveness of essential**

**postnatal care** instructional package The Effectiveness of an information booklet was supported by the findings in a study which was conducted by Saeed, G.A., Fakhar, S., Rahim, F., and Tabassum, S. (2008.) 3 where educational leaflets and counseling on contraceptive use were administered . Six hundred women were done in two groups matched for age, parity and socioeconomic status at Pakistan. At their follow-up visit (8–12 weeks) postpartum, 19 (6.3%) women in the nonintervention group had started contraceptive use, whereas 153 (50.8%) had decided to start contraception in the next 6 months, and 129 (42.8%) women were still undecided.

**Conclusion:** Based on the findings of the study the following conclusions were drawn. The actual gain score was consistently high in the health outcome of mother and infant in the experimental group after the administration of “Essential postnatal instructional package”. Thus it is concluded that the Essential postnatal instructional package on postnatal care and infant care was effective.

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