Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAME ON KNOWLEDGE REGARDING CARE OF LOW BIRTH WEIGHT BABIES AMONG POSTNATAL MOTHERS ADMITTED IN SELECTED MATERNITY HOSPITAL BANGALORE

Author's Name: Geetha K B[1], Nirmala M L[2]

Affiliation:

1. Lecturer, Government College of Nursing, Kodagu, India.
2. Principal, Gayathri College of Nursing, Kottigepalya, Bangalore, Karnataka, India.

Corresponding Author Name & E-Mail: Nirmala M L , nirmalaramu1116@gmail.com

ABSTRACT

The present study aimed to Assess the effectiveness of structured teaching programe on knowledge regarding care of low birth weight babies among postnatal mothers admitted in selected maternity hospital Bangalore The research approach used was pre-experimental approach. The Research Design selected for the study was a one group pre-test and post-test design. The setting was The unity life line hospital, BBMP maternity hospital, gayathri hospital Bangalore. The sample includes 60 post natal mothers selected by non – probability convenient sampling technique. structured teaching program was conducted on care of low birth weight baby were prepared. The results shows that the posttest Mean Knowledge score was higher (mean 84.3% and SD = 3.75) when compared with pretest Mean Knowledge score value (mean 44% and SD = 2.8). Further the mean knowledge enhancement scores was 43.7% .In the pre Test, results show that 70% of the post natal mothers possess inadequate knowledge as compared to 27% moderate and 2% adequate knowledge on care of post natal mothers regarding care of low birth weight babies. The Post Test results show that 87% of the post natal mothers regarding care of low birth weight babies possess adequate knowledge as compared to 13% of postnatal mothers noticed with moderate knowledge The statistical paired 't' test implies that the difference in the pretest and posttest Knowledge Scores was found statistically significant at 5% ($t=7.13^*$, $p<0.05$),There exist a Significant association in pretest ($\chi 2$ – 5.95) established between type of family and knowledge level of the respondents. Hence H2 hypothesis accepted, There exist a Non-Significant association in pretest with demographic variable like age ($\chi 2$ – 0.811), educational qualification ($\chi 2$ -4.61) , occupation ($\chi 2$ -5.11) , family income ($\chi 2$ -0.96), religion ($\chi 2$ – 4.79), mode of delivery ($\chi 2$ – 1.48) ,birth weight of babies ($\chi 2$ – 0.62) , number of children ($\chi 2$ -3.91), source of information ($\chi 2$ -1.8). Hence H2 hypothesis rejected. The Findings of the Study indicate Interventional protocol was significantly effective in enhancing the knowledge of postnatal mothers regarding the care of low birth weight babies

Keywords: LBW (low birth weight), NICU, IUGR, WHO, One group pretest, posttest design; convenient Sampling Technique.

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

INTRODUCTION

"Children's health–Tomorrow's wealth"

Children are the wealth of any country. They are the most vulnerable asset for any society. They are the builders of the future of any nation.

'Human Life is precious–that is the message we often hear: Human life is precious''. We all know how delightful it is to hear a small child laugh or to look into the trusting eyes of a newborn. And when we look into the eyes of our own son or daughter our joy is even greater. But beyond the intrinsic value of a human being there is an economic value as well by each mother. A major part in a baby's development is directly linked to the actions of them other.

Low –birth weight babies are more likely than babies of normal weight to have health problems during the newborn period. Birth weight is the first weight of a live or stillborn baby which should preferably be taken within the first hour of life. Low birth weight (LBW) is at ermused to describe babies who are born weighing less than 2500 grams (5ponnds,80ounces) In contrast, the average newborn weight about 7pounds.babies with a birth weight of less than 1500 gram (up to and including 1499 gram) are considered as very low birth weight (VLBW) babies and babies with a birth weight of less than 1000 gram considering as extremely lowbirthweight babies(ELBW)[1].

The term low birth weight refers to an absolute weight of <2500 g regardless of gestational age. Small for gestational age (SGA) refers to newborns whose birth weight is less than the 10th percentile for gestational age. This report will focus specifically on birth weight <2500 g. Further details related to case definitions for PTB [2], IUGR and SGA are included in separate GAIA reports.

Globally, it is estimated that 15–20% of all births, or >20 million newborns annually, are low birth weight infants. Low- and middle-income countries account for a disproportionate burden of LBW; over 95% of the world's LBW infants are born in LMICs. There are marked global and regional variations in LBW rates. An estimated 6% of infants are born LBW in East Asia and the Pacific, 13% in Sub-Saharan Africa, and up to 28% in South Asia [3]. Up to half of all LBW infants are born in south Asia [4]. High-income regions report lower LBW rates, including 6.9% from UK [5]. Of concern is the estimated increase in LBW rates in certain middle-income countries such as Oman, where the LBW rate went from 4% in 1980 to 8.1% in 2000 [6].

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

One of the major challenges in monitoring the incidence of LBW is that more than half of infants in the LMICs are not weighed [7]. Population-based survey data often rely on modeled estimates, with statistical methods to adjust for underreporting and misreporting of birth weight. In the context of vaccine safety monitoring, accurate ascertainment of birth weight in LMICs will continue to require attention and investment to improve accuracy and reporting of this important health indicator.

The nurses have great role in reducing neonatal morbidity and mortality through the care of low birth weight baby because in the initial days they are the prime care givers to the newborn baby. Primipara mothers need to acquire knowledge regarding care of lowbirth weight newborn because the birth of a baby with less weight is an anxiety providing situation for the mother and the entire family.

RESEARCH PROBLEM

"a study to assess the effectiveness of structured teaching programe on knowledge regarding care of low birth weight babies among postnatal mothers admitted in selected maternity hospital bangalore"

OBJECTIVES OF THE STUDY:-

The objectives are:

- To assess the knowledge of postnatal mothers regarding care of low birth weight babies.
- To assess the posttest knowledge of postnatal mothers regarding care of low birth weight babies.
- To assess the effectiveness of structured teaching program me on knowledge of postnatal mothers regarding care of low birth weight babies.
- To find out the association between the knowledge of postnatal mothers and regarding care of low birth weight babies with their selected demographic variables.

MATERIAL AND METHODS

The sample includes 60 post natal mothers selected by. structured teaching program was conducted on care of low birth weight baby were prepared. The Pilot Study was conducted with 6 postnatal mothers. The reliability of the tool was established by split half technique and the reliability co-efficient were calculated A pre-experimental design was adopted The Research Design selected for the study was a one group pre-test and post-test design to accomplish the study objectives. non – probability convenient sampling technique was used to select 60 postnatal mothers in selected maternity hospitals at Bangalore. Permission was taken from the higher authorities of the college of nursing and hospital . The setting was The unity life line hospital, BBMP maternity hospital, gayathri hospital Bangalore, The researcher

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

approached the postnatal mothers in selected maternity hospitals in bangalore . A sampling frame was prepared for those who fulfil the inclusive criteria of the current study. Researchers explained the main aim of the study.

Specification of the instrument and related measurement

Part-I Demographic profile consist of 10 items

Part-II

Investigator prepared containing 30 structured Knowledge Questionnaire on Low Birth weight and management

Instrument consists of 30 structured knowledge questions regarding Low Birth weight and management. The maximum score expected 30 and minimum score was 6. The data gathered was analyzed and interpreted interns of objectives of the study. The Mean, Median, Mean Percentage & SD of knowledge were analyzed by using descriptive and inferential statistics.

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

Universe International Journal of Interdisciplinary Research
(International Peer Reviewed Refereed Journal)
DOI No. – 08.2020-25662434

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

RESULTS

Demographic variables	Categories	N	KNOWLEDGE		Calculated x^2 value	df	Table value
			median	Above median			
			n	n			
Age	21-25 years	29	16	13	0.811	3	7.82 NS
	26 -30 years	21	10	11			
	31-35 years	7	3	4			
	36 years- above	3	2	1			
Educational qualification	No formal education	12	8	4	4.61	3	7.82 NS
	Primary school	8	2	6			
	Higher secondary	24	14	10			
	Degree	16	7	9			
Occupation	House wife	26	16	10	5.11	3	7.82 NS
	Government worker	6	2	4			
	Business	6	1	5			
	Self employee	22	12	10			
Type of family	Joint family	17	13	4	3.84	1	3.84 S*
	Nuclear family	43	18	25			
Family income	Below 10,000	3	1	2	0.96	1	7.82 NS
	10,001 – 20,000	18	10	8			
	20.001 – 30,000	22	12	10			
	30,001 and above	17	8	9			

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

Religion	Hindu	36	21	10	4.79	3	7.82 NS
	Christian	14	8	6			
	Muslim	10	2	8			
	Others(jain/buddist)	0	0	0			
Type of delivery	Normal delivery	38	22	16	1.48	1	3.84 NS
	LSCS	22	9	13			
Birth weight of newborn	Less than 2.5 kg	12	5	7	0.62	2	5.99 NS
	2.5 kg to 3.5 kg	42	23	19			
	More than 3.5 kg	6	3	3			
Number of children	First baby	24	14	10	3.91	2	5.99 NS
	Two children	22	13	4			
	Three children and more	14	4	10			
Source of information	Mass media	28	16	12	1.8	3	7.82 NS
	Academic education	6	4	2			
	Friends and relatives	18	8	10			
	Books and magazine	8	3	5			

Table-1: **Association between knowledge score with selected demographic variables: N=60**

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

DISCUSSION

NOTE: S* -- Significant at 0.05 level(P<0.05). , NS – Non significant at 0.05 level (P>0.05).

There exist a Significant association in pretest ($\chi 2$ – 5.95) established between type of family and knowledge level of the respondents. Hence H_2 hypothesis accepted

There exist a Non-Significant association in pretest with demographic variable like age (χ^2 – 0.811), educational qualification (χ^2 -4.61) , occupation (χ^2 -5.11) , family income (χ^2 -0.96), religion (χ^2 – 4.79), mode of delivery (χ^2 – 1.48) ,birth weight of babies (χ^2 – 0.62) , number of children (χ^2 -3.91), source of information (χ^2 -1.8). Hence H_2 hypothesis rejected.

DISCUSSION

The study pre-test finding reveals In the pre Test, results show that 70% of the post natal mothers posses inadequate knowledge as compared to 27% moderate and 2% adequate knowledge on care of post natal mothers regarding care of low birth weight babies. The Post Test results show that 87% of the post natal mothers regarding care of low birth weight babies posses adequate knowledge as compared to 13% of women noticed with moderate knowledge.

CONCLUSION

The present study revealed that the postnatal mothers have inadequate knowledge and practice regarding the care of low birth weight .After implementation of structured Teaching Programme (STP), knowledge of postnatal mothers regarding care of low birth weight babies is increased significantly. The paired "t" test that was conducted between pre test and post test knowledge scores indicates that the structured Teaching Programme (STP) was statistically effective.

REFERENCES

1. Organization WH. International statistical classification of diseases and related health problems, tenth revision, 2nd ed. World Health Organization; 2004.

2. Quinn J.A., Munoz F.M., Gonik B., Frau L., Cutland C., Mallet-Moore T., Kissou A., Wittke F., Das M., Nunes T., Pye S., Watson W., Ramos A.A., Cordero J.F., Huang W.T., Kochhar S., Buttery J., Brighton Collaboration Preterm Birth Working Group Preterm birth: Case definition & guidelines for data collection, analysis, and presentation of immunisation safety data. *Vaccine.* 2016;**34**(49):6047–6056.

3. WHO. Global nutrition targets 2025: low birth weight policy brief Geneva. World Health Organization; 2014.

4. Lawn J.E., Cousens S., Zupan J. 4 million neonatal deaths: when? Where? Why? *Lancet.* 2005;**365**

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR

© UIJIR | ISSN (O) – 2582-6417
JUNE 2026 | Vol. 07 Issue 01
www.uijir.com

(9462):891–900

5. Johnson C.D., Jones S., Paranjothy S. Reducing low birth weight: prioritizing action to address modifiable risk factors. *J Public Health (Oxf)* 2016

6. Islam M.M. Increasing incidence of infants with low birth weight in Oman. *Sultan Qaboos Univ Med J.* 2015;**15**(2):e177–e183.

7. OrganisationUNCsFaWH. Low Birthweight. Country, regional and global estimates. UNICEF, New York: United Nations Children's Fund and World Health Organization; 2004.

DOI Link :: https://doi-ds.org/doilink/07.2026-48426944/UIJIR