

## **A STUDY TO ASSESS EFFECT OF HEALTH EDUCATION ON MANAGEMENT OF LOW-BIRTH-WEIGHT BABY AMONG THE POST-NATAL MOTHER**

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### **ABSTRACT**

*Low birth weight is a term used to describe babies who are born weighing less than 2,500 grams. Babies weighing less than 1,500 grams at birth are considered very low birth weight. Low birth weight is most often caused by premature birth. Some babies with low birthweight are healthy, even though they're small. But having a low weight at birth can cause serious health problems for some babies. Low birth weight is further categorized into very low birth weight (VLBW, <1500 g) and extremely low birth weight (ELBW, <1000 g). The objective of this study is to assess the Knowledge of mother regarding management of low-birth-weight baby among the post-natal mother. In this study quantitative research approach and descriptive research design and convenience sampling technique was used to assess the effect of health education on management of low-birth-weight among the post-natal mother. The study findings showed that in pretest majority 41(68.0%) had average knowledge, 15(25.0%) had good knowledge, 4(7.0%) had poor knowledge where as in post-test majority 54(90.0%) had good knowledge, 6(10.0%) had average knowledge of postnatal mother. health education plays a vital role in improving the management of low-birth-weight babies among postnatal mothers. By providing mothers with knowledge and skills related to feeding, hygiene, monitoring growth, recognizing illness signs, and seeking medical help promptly, health education programs contribute significantly to better health outcomes for these vulnerable infants. Empowering mothers through education enhances their confidence and ability to provide appropriate care, ultimately promoting the well-being and development of low-birth-weight babies.*

**Keywords:** Health education on low-birth-weight, postnatal mother, low-birth-weight.

## INTRODUCTION

Low birth weight is a term used to describe babies who are born weighing less than 2,500 grams. Babies weighing less than 1,500 grams at birth are considered very low birth weight. Low birth weight is most often caused by premature birth. Some babies with low birthweight are healthy, even though they're small. But having a low weight at birth can cause serious health problems for some babies.<sup>1</sup> Low birth weight is further categorized into very low birth weight (VLBW, <1500 g) and extremely low birth weight (ELBW, <1000 g). low birth weight is a result of preterm birth (PTB, short gestation <37 completed weeks), intrauterine growth restriction (IUGR, also known as fetal growth restriction), or both.<sup>2</sup> WHO (2009) focused on the importance of caring for low-birth-weight baby, including feeding kangaroo mother care, hygiene, cord & skin care, early detection and treatment of infection and complications which can remarkably reduce mortality of low-birth-weight baby. In India over 30% of the baby are born as low birth weight. In India over 30% of the baby are born as low birth weight. Nearly 75% of the neonatal deaths and 50% of baby death occur among low-birth-weight neonates. In Davangere in the year 2009 there are 995 cases of low birth babies are admitted in NICU of Bapuji child health institution among there are nearly 350 deaths are reported. Along with training of health care professional including nurses, TBA's and Anganwadi workers, it has also been universally accepted that improved survival rate of low birth babies can be successfully achieved by training and educating the mother's and family members on home- based care. WHO estimates that about 25 million low birth weight babies are born each year globally, consisting 17 percent of all live births of which nearly 95% of them are in developing countries. The incidence of low birth weight varies widely between regions of the world In India the infants who weigh less than 2.5 kg at birth represent about 26% of all live births.<sup>3</sup> Nearly the world average infant mortality which has been estimated about 54 per 1000 live births out of which 51% of deaths are due to low birth weight in India and Karnataka is also leading at a rate of infant mortality of 49 per 1000 live births. The vast majority of low-birth- weight babies in India are born in rural areas with a prevalence of 24% and in urban areas with 21%. As the mother is both the "seed and the soil" There is link between the health of the mother and the health of a child and more importance should be given for antenatal mothers. Hence the investigator felt the need to assess the antenatal mother's knowledge regarding prevention of low-birth-weight babies and to prepare a structured teaching programme for the purpose of improving the knowledge of antenatal mothers.

## METHODOLOGY

In the present study, a Quantitative approach a descriptive survey research design was used in this study to check the effect of health education on management of low-birth-weight baby among the post-natal mother in Parul Sevashram hospital. A sample size of the study was 60. Tools for data collection consisted of Structured Interview schedule which consisted of 2 parts that is, socio-demographic variables such as Age, Religion, Education, Occupation, Income, Family type, Dietary habit, Residence. The second part consisted of Knowledge questionnaire to assess the effect of health education on management of low-birth-weight baby which had 18 questions. After obtaining formal administrative approval from the concerning authorities and informed consent from the samples the investigators collected the data from the patients using the mentioned validated tools.

## RESULTS

The data obtained were analyzed with respect to the objectives of the study by using the descriptive and inferential statistics

Section-A: Description of selected socio-Demographic variable.

SR.NO			Frequency	Percentage
1	Age	18-24	27	45
		25-29	30	50
		30-34	3	5
2	Religion	Hindu	56	93.33
		Muslim	4	6.66
3	Education	primary	22	36.66
		medium	31	51.66
		higher	7	11.66
4	Occupation	housewife	31	51.66
		farmer	7	11.66
		business	59	98.33
		gov.	3	5
5	Income	<10000	18	30
		10000-20000	26	43.33
		20000-30000	8	13.33
		>30000	8	13.33
6	Types of family	nuclure	13	21.66
		joint	45	75
		extended	0	0
		single parent	2	3.33
7	Dietary habit	vegetable	34	56.66
		mixed	26	43.33
8	Residence	urban	33	55
		rural	27	45

TABLE 1: FREQUANCY AND PERCENTAGE OF SOCIO- DEMOGRAPHIC DATA OF POST-NATAL MOTHER.

Table 1 Depicts that the frequency and the percentage distribution of socio-demographic data of post-natal mothers. Majority of the mothers belongs from the age group of 25-29 years that are 30 (50%), were 27 (45%) from age group of 18-24 years, only 3 (5%) from age group of 30-34. Majority religion of mothers is Hindu 56 (93.33%), and from Muslim are 4(6.66%). Majority education of mothers is primary 22 (36.66%), medium 31 (51.66%), higher 7 (11.66%). Majority occupation of mother is housewife 31 (51.66%), farmer 7 (11.66%) and business 59 (98.33%), government 3(5%). Majority monthly family income of womens is from <10000 Rs 18 (30%), 10000-20000 RS 26 (43.33%), 20000-30000 8(13.33%), >3000 8(13.33%). Majority type of family of mothers are joint 45 (75%) and from nuclear family are 13 (21.66%), from extended 0, from single parent 3 (3.33%). Majority dietary habit of mothers is vegetable 34 (56.66), mixed 26 (43.33). Majority residence of mothers is urban 33 (55%) and rural is 27 (45%).

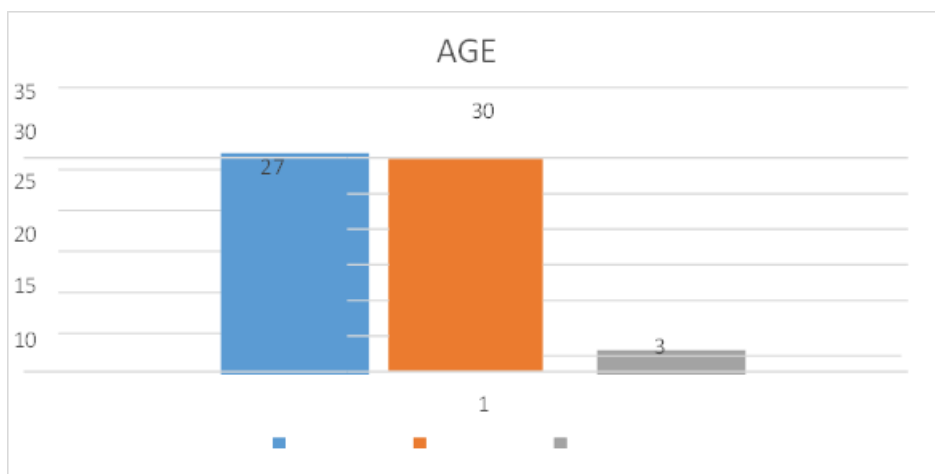


FIG 2: DISTRIBUTION OF AGE OF MOTHERS

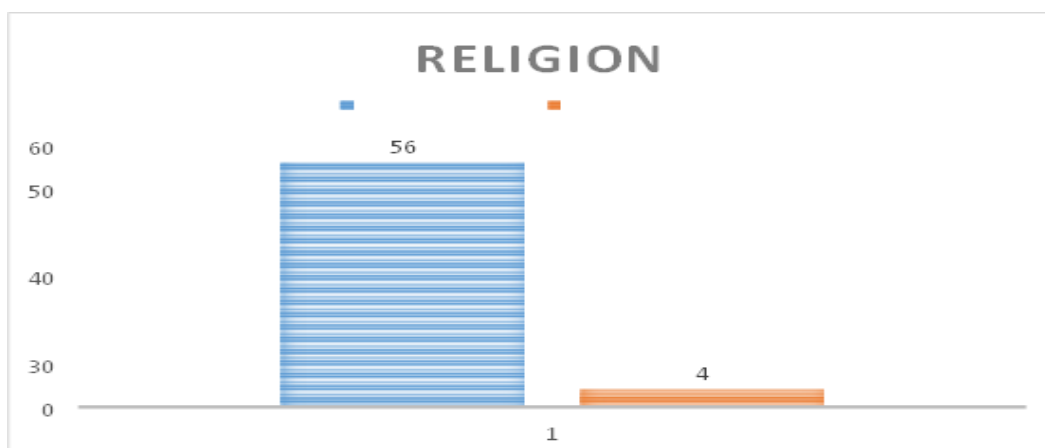


FIG 3: DISTRIBUTION OF RELIGION OF POSTNATAL MOTHER

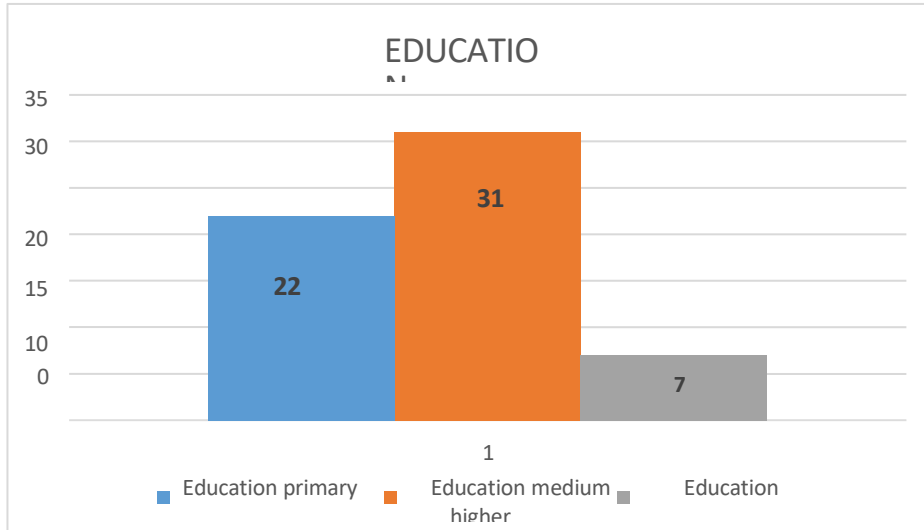


FIG 4: DISTRIBUTION OF EDUCATION OF POSTNATAL MOTHER

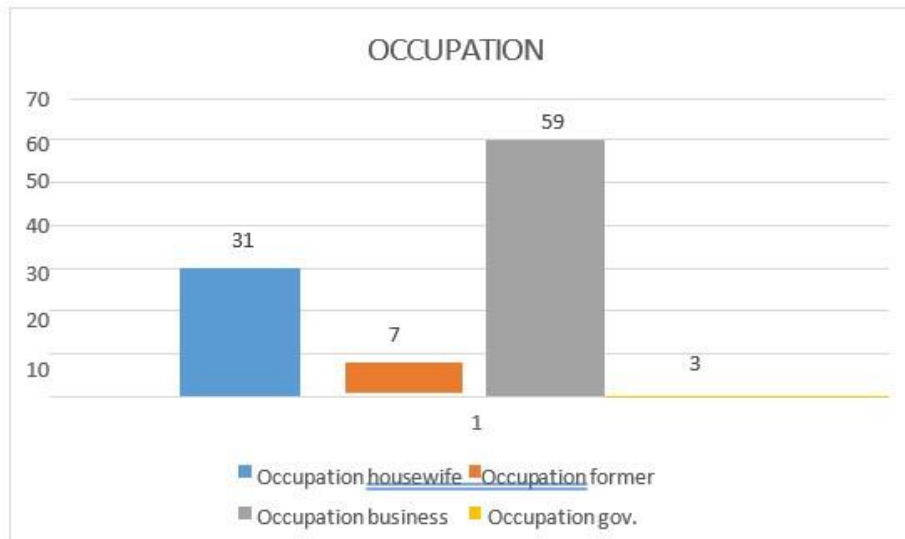


FIG 5: DISTRIBUTION OF OCCUPATION OF POSTNATAL MOTHER

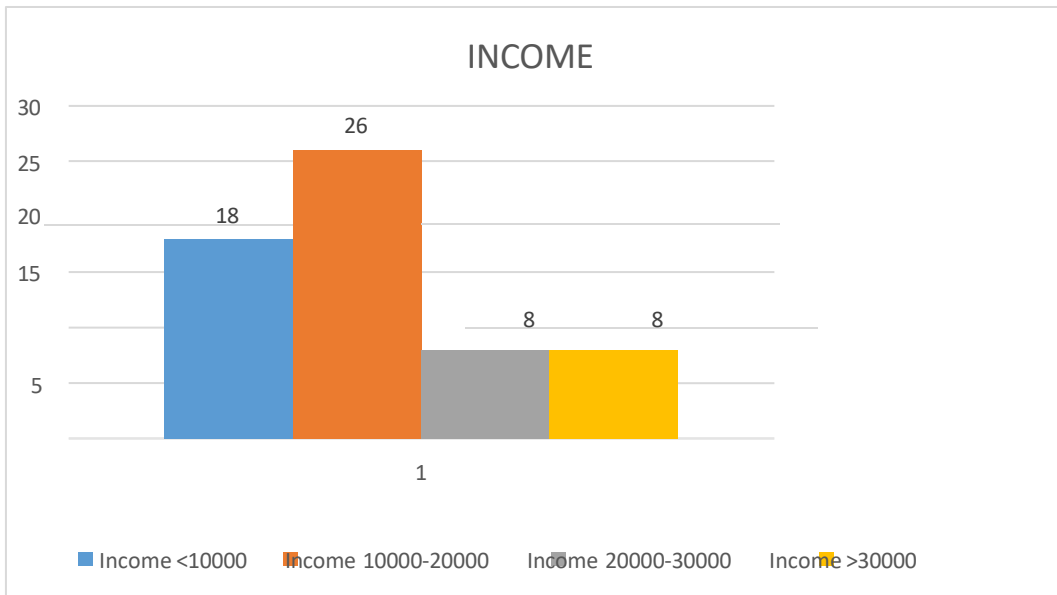


FIG 6: DISTRIBUTION OF INCOME OF POSTNATAL MOTHER

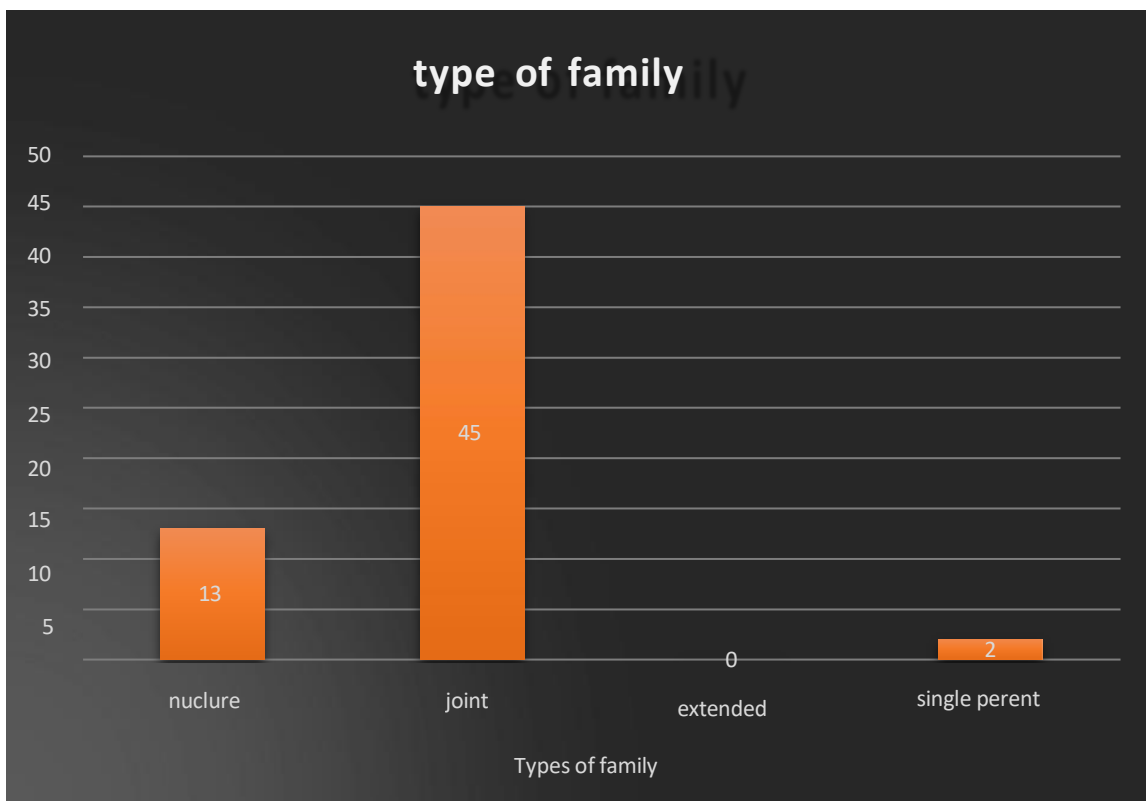


FIG 7: DISTRIBUTION OF TYPE OF FAMILY OF POSTNATAL MOTHER

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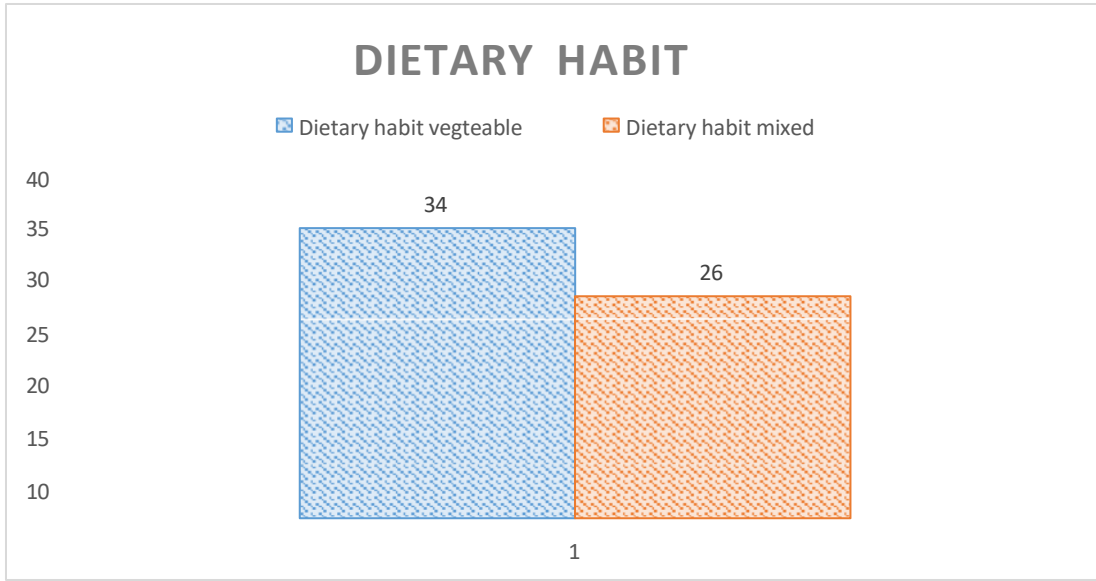


FIG 8: DISTRIBUTION OF DIETARY HABIT OF POSTNATAL MOTHER

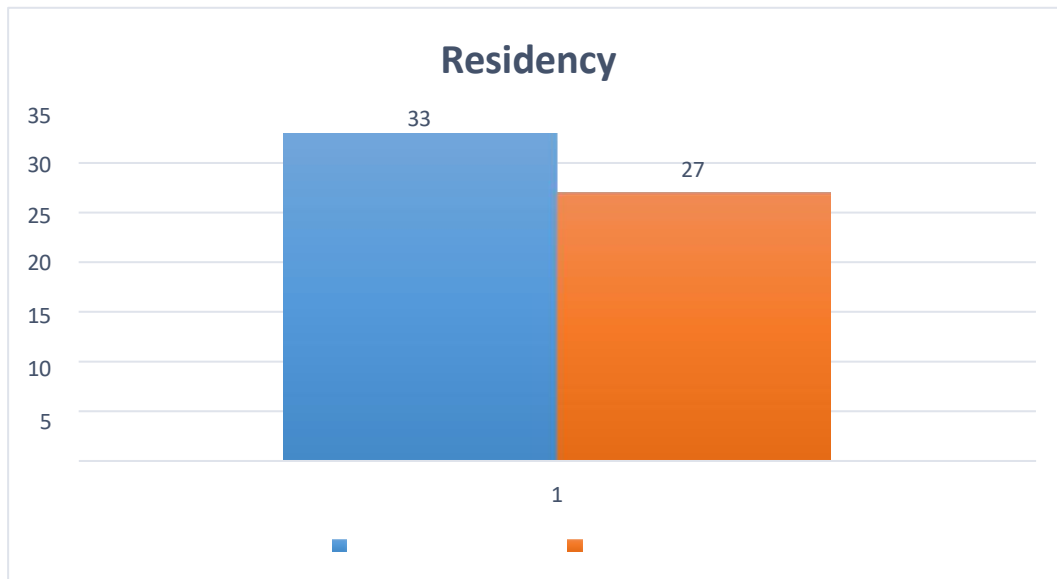


FIG 9: DISTRIBUTION OF RESIDENCY OF POSTNATAL MOTHER

TABLE 2: FREQUENCY AND PERCENTAGE OF THE EFFECT OF HEALTH EDUCATION ON MANAGEMENT OF LOW-BIRTH-WEIGHT BABY ON AMONG POST- NATAL MOTHER.

N=60

Knowledge Assessment	PRE-TEST		POST-TEST	
	FREQUENCY	PERCENTAGE	FREQUENCY	PERCENTAGE
POOR KNOWLEDGE	4	7	0	0
AVAERAGE KNOWLEDGE	41	68	6	10
GOOD KNOWLEDGE	15	25	54	90

Table 2 Depicts that the frequency and the percentage distribution of Pre-test level of knowledge about the effect of health education on management of low-birth-weight baby on among post- natal mother. 4 (7.0%) postnatal mother having poor knowledge were 41(68.0%) postnatal mother having Average knowledge, 15(25.0%) postnatal mother having good knowledge.

Frequency and the percentage distribution of post-test level of knowledge about the effect of health education on management of low-birth- weight baby on among post-natal mother. 0(0%) postnatal mother having poor knowledge were 6(10%) postnatal mother having Average knowledge, 54(90.0%) postnatal mother having Good knowledge.



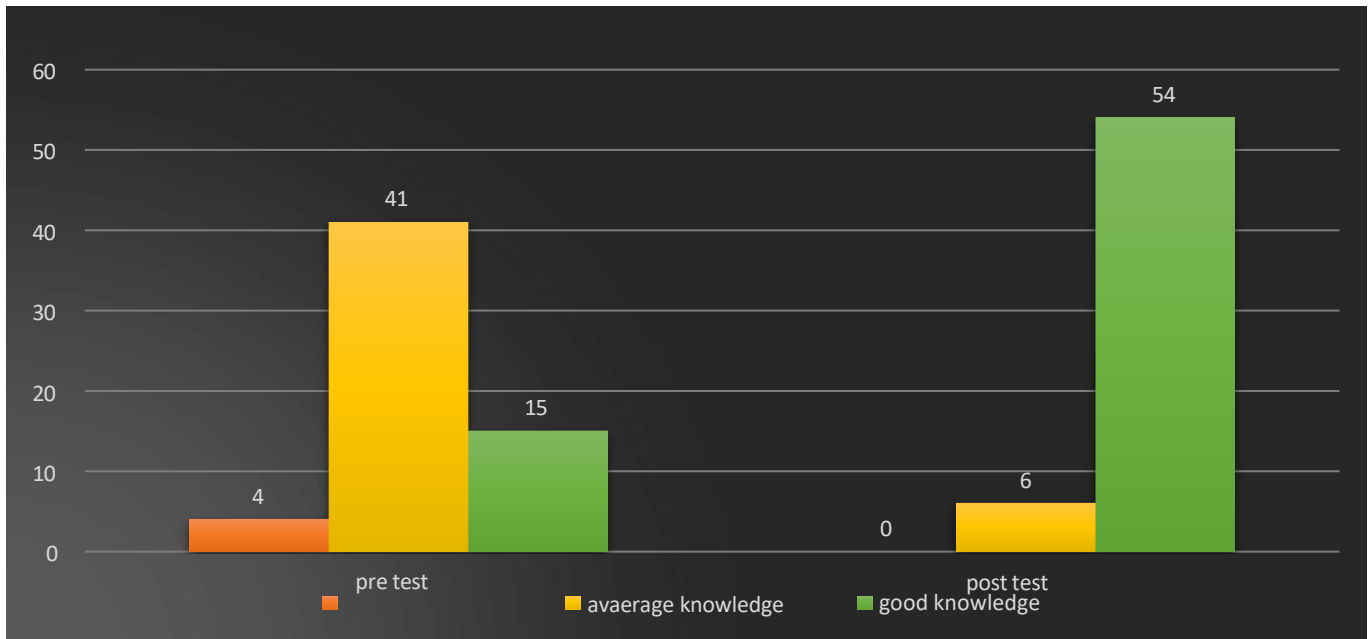


FIG 10: DISTRIBUTION OF RESULT OF PRE-POST TEST OF POSTNATAL MOTHERS

TABLE 3: ASSOCIATION BETWEEN SOCIO- DEMOGRAPHIC VARIABLES AND ASSOCIATION BETWEEN KNOWLEDGE ABOUT LOW-BIRTH- WEIGHT BABY WITH THEIR SOCIO DEMOGRAPHIC VARIABLE

SR. NO			Poor knowledge	Average knowledge	Good knowledge	CHI SQUARE	df	P value
1	Age	18-24	1	23	3	1.29	2	0.52NS
		25-29	2	24	4			
		30-34	1	1	1			
2	Religion	Hindu	3	49	6	2.62	1	0.10NS
		Muslim	1	2	1			
3	Education	primary	1	19	2	7.85	2	0.02S
		medium	2	26	3			
		higher	1	3	3			
4	Occupation	housewife	3	28	1	3.19	3	0.36 NS
		former	1	4	2			
		business	0	14	4			
		gov.	0	1	2			
5	Income	<10000	1	16	2	6.40	3	0.03S
		10000-20000	2	20	3			
		20000-30000	1	4	3			
		>30000	0	5	3			

6	Types of family	nuclure	1	11	1	1.16	2	0.55NS
		joint	2	39	5			
		extended	1	1	0			
		single parent	0	0	0			
7	Dietary habit	vegetable	3	27	4	7.76	1	0.004S
		mixed	1	22	3			
8	Residence	urban	2	26	4	1.28	1	0.28NS
		rural	2	21	4			

Table 3 Depicts the association between socio-demographic variables and association between socio-demographic variables and association between knowledge about low-birth-weight baby with their socio-demographic variables. Result shows that age, religion, occupation, types of family, residence was found statistically non-significant at  $p > 0.05$  level and education, income, dietary habit was found statistically significant at  $p < 0.05$ .

## DISCUSSION

The study investigated the effect of health education on management of low-birth-weight baby among the post-natal mother. A sample of 60 mother participated in the study. Data was collected through a demographic questionnaire and a knowledge test.

In this study the level of knowledge of mothers regarding management of low-birth-weight baby revealed that before health education majority had mother had average knowledge 41(68%) 38 and 15(25%) had good knowledge, 4(7%) had poor knowledge about management of low-birth-weight baby. A similar study done by Mrs. Kavita Bhoknal 2018 has conducted A quasi experimental study to Effectiveness of Health Education Package on Knowledge and Practice Regarding Care of Low-Birth-Weight Babies (LBW) Among Post Natal Mothers, pre and post-test design without control group approach was undertaken among postnatal mothers of Pravara Rural Hospital, Loni (Bk). The result shows that in pre-test, the overall knowledge score was which is 66% (average). The result shows that In pre-test, the overall knowledge score was which is 66% (average) whereas after implementation of health education package (post-test) the score has improved which is 91.81% (good).

## CONCLUSION

According to study findings, that there is lack of knowledge regarding low-birth-weight baby among the post-natal mother. The study also shows that there is no association between the level of knowledge about low-birth-weight baby with their selected demographic variables. Study

concludes that health education improves knowledge.

### CONSENT AND ETHICAL APPROVAL

Approval from the institutional research and ethical committee (PUIECHR/PIMSR/00/081734/6006) was obtained, along with specific informed consent from the students, before conducting the study.

### CONFLICT OF INTEREST

The authors have affirmed that they have no competing interests to declare.

### AUTHORS CONTRIBUTION

Author 1- Approval and finalization of the study's conception and design, as well as manuscript drafting.

Author 2- Collection and analysis of data, as well as interpretation of results.

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