Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

A Study to Assess the Effectiveness of Educational Package in Terms of Knowledge Regarding Essential New Born Care Among Mother in the Postnatal Wards of Selected Hospital, Nadiad

Krupal Parmar[1], Krupali Parmar[2], Mansi Parekh[3], Nainesh Parmar[4], Niyanta Parmar[5]

Abstract

The neonatal period, covering the first 28 days of life is a vital stage marked by significant physiological changes and the new borns adjustment to the crucial for the baby's survival and long term health. Proper new born care is essential in decreasing neonatal illness and death promoting healthy growth and development. Worldwide neonatal mortality is a major public issue, especially in low and middle income nations.The World Health Organization (WHO) reports that nearly 2.4 million children die within their first month of life annually, with most of these deaths happening within the first week. Infection are a leading cause of neonatal mortality, responsible for about one-third all neonatal deaths. New born are practically vulnerable to infection due to their underdeveloped immune system.Education on essential new-born care, covering aspects like infection prevention, breastfeeding thermal care, and immunization, plays a critical role in decreasing these fatalities. Postnatal wards offer a special chances to educate mothers about essential new-born care. During this period mothers are typically more open to learning and incorporating new practice that can benefit their infants. Tailored educational programs designed for postnatal mothers of essential new-born care practice and encourage their adoption.This study assess the effectiveness of an educational package design to enhance mothers' knowledge regarding essential new born care in selected hospital in Nadiad. To evaluate the impact of an educational package on mothers' knowledge about essential new born care in post natal wards. A quasi experimental study design was employed. The study include 40 mothers in post natal wards from selected hospital in Nadiad. Participants were divided into two groups: An experimental group receiving the educational package and a control group receiving standard care. Pre-test and post- test knowledge assessments were conducted using a structured questionnaire. The educational package comprised informative flip book interactive session focus on essential new born care such as breast feeding, hygiene, immunization and recognizing dangerous sign. The pre-test knowledge scores of both groups were comparable. Post intervention, the group showed a significant increase on knowledge scores compared to the pre- test. Statistical analysis using paired T test revealed that the educational package effectively improved mother's knowledge of essential new born care ($p< 0.05$). The educational package significantly enhanced mother's knowledge regarding essential new born care in post natal wards. Implementing such educational interventions can improve new born health outcomes by empowering mothers which crucial care. Further studies are recommended to assess long term retention of knowledge and its impact on new born health.

Keywords: *Essential New Born Care, Educational Package, Post Natal Wards, Mother's Knowledge, Quasi Experimental Study.*

Introduction

New born care is vital aspect of maternal and child health, especially during the postnatal period when infants are most vulnerable to health complication. Essential new born care encompasses a set of practice aimed at ensuring the survival, health, and overall well-being of new-borns. These practices are critical during the first 28 days of life, a period that accounts for a significant portion of global child mortality. Key components of essential new-born care include immediate and thorough drying of the baby, skin-to skin contact, and initiation of breast feeding within the first hour, hygienic umbilical cord care, thermal protection, and immunization.

Additional essential new-born care practice involve identifying and managing new-born infections ,recognizing sign of illness, and providing vitamin K and prophylactic eye care. When implemented

[1] SY PB BSc nursing student, Dinsha Patel College of nursing, Maganbhai Adenwala mahagujarat university, Nadiad, Email: krupalparmar8456@gmail.com, (Corresponding Author)
[2] S.Y PBBSC Nursing, Dinsha Patel College of Nursing, Maganbhai Adenwala Mahagujarat University, Nadiad.
[3] S.Y PBBSC Nursing, Dinsha Patel College of Nursing, Maganbhai Adenwala Mahagujarat University, Nadiad.
[4] S.Y PBBSC Nursing, Dinsha Patel College of Nursing, Maganbhai Adenwala Mahagujarat University, Nadiad.
[5] S.Y PBBSC Nursing, Dinsha Patel College of Nursing, Maganbhai Adenwala Mahagujarat University, Nadiad

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

correctly these practice can significantly reduce morbidity and mortality rates. Despite the availability of guidelines and protocols, many mothers particularly in low-resources settings, lack of knowledge and skills to implement these essential practice effectively. Factors contributing to this knowledge gap include limited access to health care services, cultural beliefs and inadequate health education.

There are an urgent need for educational intervention to equip mothers with the necessary knowledge and skills to care for their new-born properly. Educational package tailored to the needs of postnatal mothers have been shown to improve knowledge related to new-born care. These package often include information on breastfeeding, infection prevention, thermal protection and other critical aspects of new-born care. By empowering mothers with the knowledge, educational intervention can significantly enhance new-born health outcomes.

Objectives

- To assess mother's knowledge before and after the administration of an educational package regarding of new born care.
- To evaluate the effectiveness of the educational package on essential new born care.

Hypotheses

H1: The mean post-test knowledge score of mothers will be significantly higher than their mean pre-test knowledge score after the administration of the education package on the essential new born care , as evident from the knowledge questionnaire at the 0.05 level of significance.

Materials and Methods

Research Approach: **The** research approach is quantitative.

Research Design: **The** design employed is a one-group pre-test and post-test design.

Research Variables

- *Independent Variable*: Educational package on new born care
- *Dependent Variables*: Knowledge regarding the essential newborn care

Research Setting: Selected hospitals in Nadiad city:

- Dr N.D. Desai Hospital & Research Centre
- C.G.G.H Hospital , Uttarsanda

Target Population: Mothers of new born baby

Criteria for Sample Selection

Inclusive Criteria:

Postnatal Mothers

- Who delivered babies at selected hospitals in Nadiad.
- Who understand English and Gujarati languages.

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

- Who are available at the time of data collection.

Exclusive Criteria

- Mothers who delivered babies with any complications or congenital anomalies.
- Those who are not willing to participate in the study.

Sample Size

From the sample population, the investigator will include 40 postnatal mothers with new born babies in selected hospitals.

Sample Technique

Purposive sample technique.

Result

Table no 1 shows the result of demographic variables, Regards age of mothers inyears16 (40%) mothers having age between 18 to 23 years, 16 (40%) mothers having age Between 24 to 29 years, 7 (17.5%) mothers having age between 30 to 35 years, 1 (2.5%) mothers having age above 35 years .Regards educational status of mothers 19 (47.5%) belong to primary schools, secondary school 17 (42.5%) mothers, non-formal education 1 (2.5%) mothers, 3(7.5%) had done graduation. Regards occupation of the mother as a work in private job, 1(2.5%), mothers as a labour work 1 (2.5%) and as a housewife 38 (95%).Regards family monthly income 15 (37.5%) were having income below 5000 rupees25 (62.5%) having monthly income between 10000-20000 rupees. Regards religion of mothers 31 (77.5 %) fits to Hindu family, 8 (20%) Muslim family and 1 (2.5%) Christian family. Regards residential status of mothers 12 (30%) belongs to urban areas and 28 (70%) belongs to rural areas .Regards types of family 10 (25%) belongs to nuclear family and 30 (75%) belongs to joint family. Regards age of new-born 5 (12.5%) had first day, 12 (30%) had new born of age 2 day, 8 (20%) had new born of age 3day and 15 (37.5%) had new born of age 4 day or above.

VARIABLES	**NO OF RESPONDENTS**	**PERCENTAGE %**
Age of mother (In year)		
A. 18-23 Years	16	40%
B. 24-29 Years	16	40%
C. 30-35 Years	7	7.5%
D. Above 35 Years	1	2.5%
Educational status of the mother		
A. Primary	19	47.5%
B. Secondary	17	42.5%
C. Non Formal	1	2.5%
D. Graduation	3	7.5%
Occupation		

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

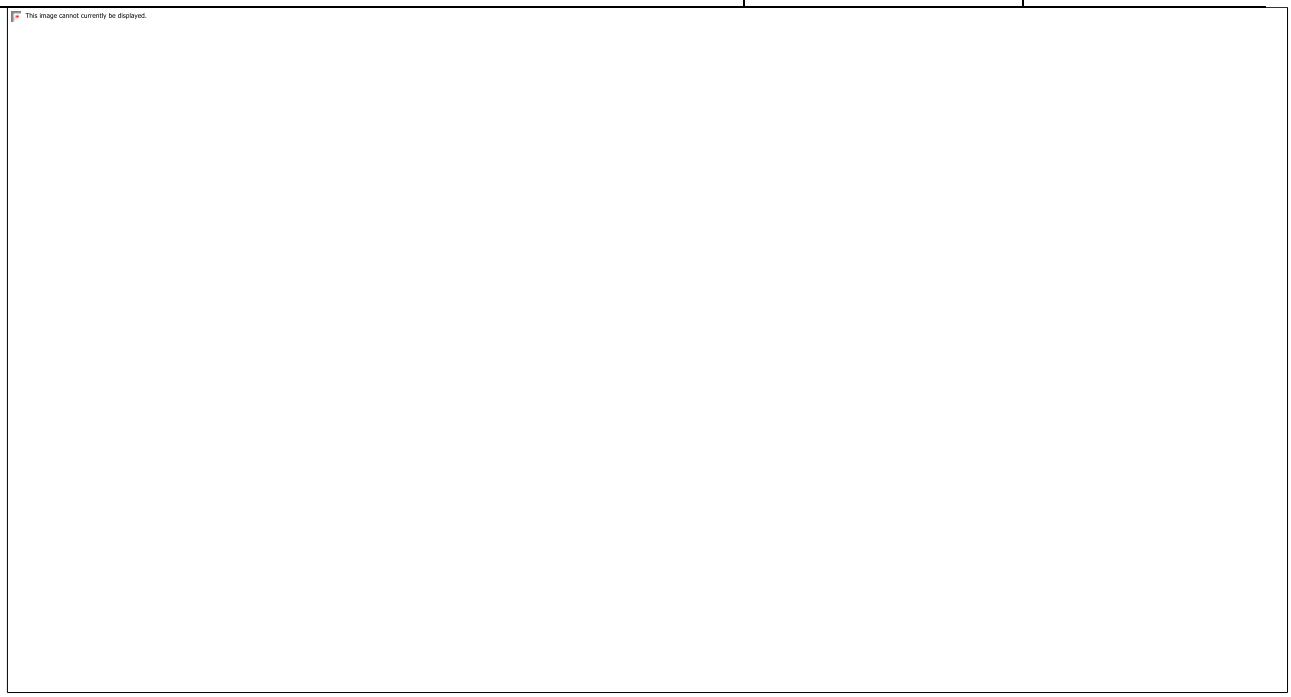
A. Government	0	0%
B. Private	1	2.5%
C. Labour	1	2.5%
D. Housewife	38	95%
Monthly Income		
A.5000	15	37.5%
B. 10000-20000	25	62.5%
C. 20000-30000	0	0%
D Above 30000	0	0%
Religion		
A. Hindu	31	77.5%
B. Muslim	8	20%
C. Christian	1	2.5%
D. Others	0	0%
Residential status of mother		
A. Urban	12	30%
B. Rural	28	70%
Type of family		
A. Nuclear	10	25%
B. Joint	30	75%
Age of the baby		
A. First Day	5	12.5%
B. Second Day	12	30%
C. Third Day	8	20%
D. Above Fourth Day	15	37.5%

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

Table no 2.1-: Frequency and percentage distribution of mothers according

Pre Test Level of Knowledge

SR. NO	Pre-test level of knowledge	No. (40)	Percentage (%)
1	Inadequate (<50%)	26	65%
2	Moderate adequate (50-75%)	12	30%
3	Adequate (>75%)	02	5%
Total		40	100%



Graph no.1. Showing distribution of mothers based on pre-test level of Knowledge

Table no.3.1-: Frequency and percentage distribution of mothers according Post-test level of knowledge

Post-Test Level of Knowledge

Sr NO	Post–test level of knowledge	No. (40)	Percentage %
1	Inadequate (<50%)	0	0%
2	Moderate adequate (50-75%)	8	20%
3	Adequate (>75%)	32	80%
TOTAL		40	100%

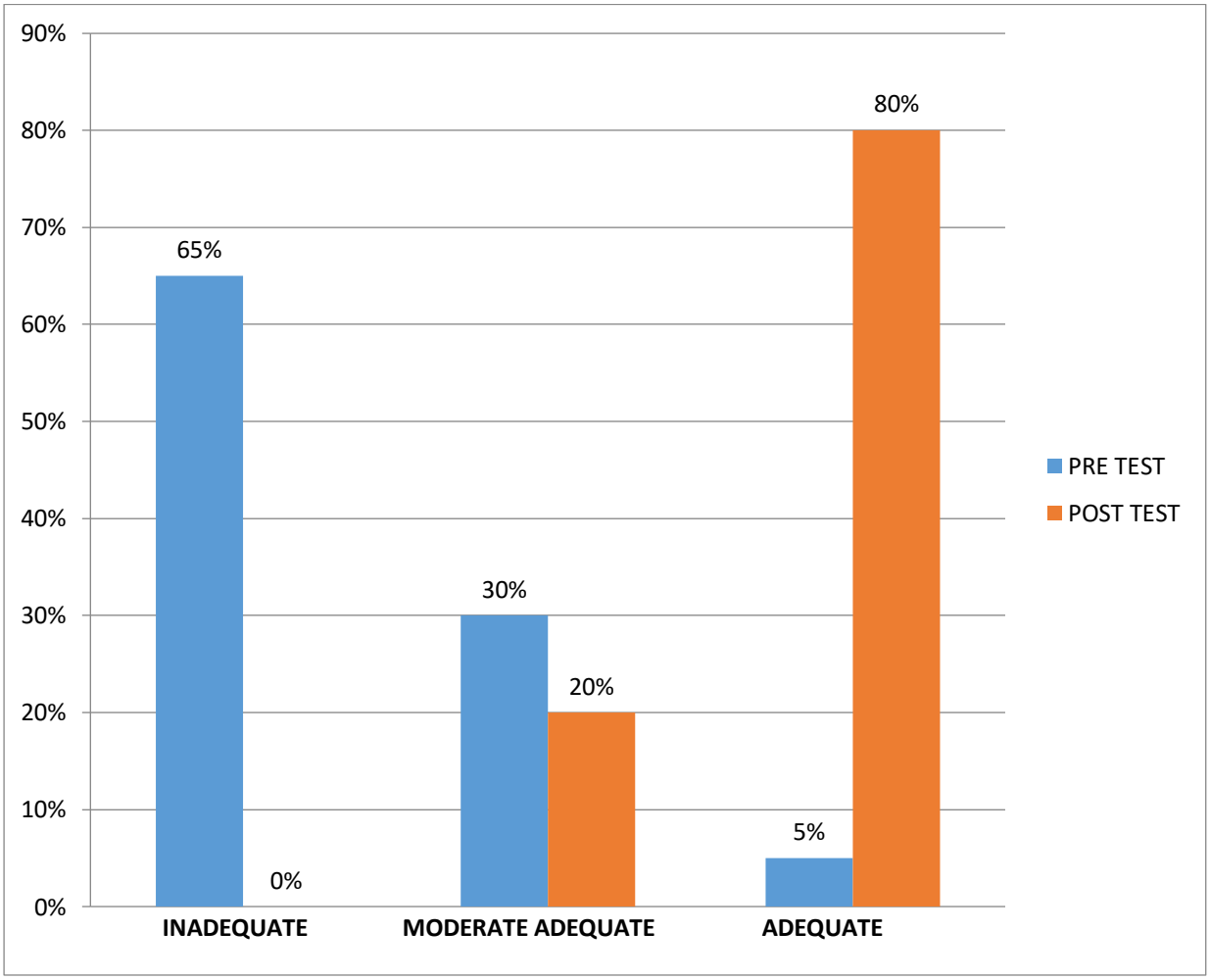
Table No 4.1. Frequency and Percentage Distribution of Mothers According to Pre-Test and Post-Test Level of Knowledge Regarding Essential New Born Care Among Post-Natal Mothers.

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

Sr. No	Level of knowledge	Before Educational package		After educational package	
		No. (40)	Percentage (%)	No. (40)	Percentage (%)
1	Inadequate (<50%)	26	65%	0	0%
2	Moderately adequate (50-75%)	12	30%	8	20%
3	Adequate (>75%)	02	5%	32	80%
Total		40	100%	40	100%

The above table 4.1 shows in the pre-test level of knowledge 26 (65%) of mothers had inadequate knowledge and 12(30%) had moderately adequate knowledge .And 2 (5%) had adequate knowledge and the post-test level knowledge ,8(20%) had moderately adequate knowledge . And 32(80%) had adequate knowledge. None of them have inadequate knowledge.

Pre-Test And Post-Test Level of Knowledge



Graph No.3 Showing Distribution of Mothers Based on Pre-Test and Post-Test Level of Knowledge

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

Table 5.1 Paired T-Test Analysis for The Significance of Pre-Test and Post-Test Knowledge Regarding Essential New Born Care Among Post Natal Mothers.

Knowledge	Max. Score	Enhancement		Paired t test	P value
		Mean	SD		
Overall	28	9.8	0.6	14.07 S D f =39	P<0.05 Sig.

Note:- Denotes significant at 0.05 level at

The above table 5.1 depicts the result of paired t –test analysis convey over to assess the statistical significance of pre-test and post-test mean score of knowledge regarding essential new born care among post-natal mothers. The greatest score was 28, mean was 9.8, standard deviation was 0.6 and paired t-test value was 14.07 was initiate to be significant 0.05 level.

That hence there exists significance effectiveness on level of knowledge before and after administration of educational package among post-natal mothers. **It indicated that there is a significant difference in knowledge after the intervention of educational package among post-natal mothers.**

Discussion

The findings of this study highlight the effectiveness of an educational package in enhancing mothers' knowledge regarding essential new-born care in postnatal wards. The significant improvement in knowledge scores post-intervention underscores the critical role that structured educational programs can play in empowering mothers to provide better care for their new borns the study's results align with existing literature, which emphasizes the importance of maternal education in reducing neonatal morbidity and mortality. By increasing mothers' understanding of key new-born care practices—such as exclusive breastfeeding, proper hygiene, temperature regulation, and early detection of neonatal illness this educational package has the potential to contribute to improved health outcomes for new-borns.

Conclusion

Human factors play a significant role in traffic accidents. Therefore it is crucial to implement traffic safety education programs. The public must be made aware of the importance of traffic-related issues and accident, as these are essential for maintaining health and safety.

Acknowledgement

I wish to express my deepest gratitude to everyone who has contributed to the completion of this research study. First of all, investigators are deeply grateful to God for his blessings, guidance, and strength throughout this journey. We thankful to God for providing us with the wisdom and perseverance needed to complete this study. Special thanks go to all the participants of this study. Without their co-operation, conducting the study would have been impossible. We express our deepest appreciation to all the experts who contributed valuable suggestions invalidating the tool. The investigators are deeply indebted to their

Journal of Ecohumanism
2024
Volume: 3, No: 7, pp. 1813– 1820
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v3i7.4331

parents, sisters, and loved ones who made their path easier through concern, encouragement, and support at every phase of the study. We express sincere thanks to all my classmates and well-wishers for their constant moral support throughout all phases of our study, whether directly or indirectly. Our heartfelt thanks also go to our parents for their moral support and prayers throughout the study.

With a grateful heart, thank you.

References

World Health Organization. New-born health
https://www.who.int/health-topics/newborn- health tab=tab 1
Global health: science and practice journal.
https://www.ghspjournal.org/
UNICEF. New-born health
https://www.unicef.org/health/newborn-health
For a detailed description of the B3 methodology, see Alkema, L. and New, J.R (2014). Global estimation of child mortality using a Bayesian B-spline bias - reduction method', annals of applied statistics, Vol 8, no.4, 2122-2149.available at http://arxiv.org/abs/1309.1602 (PDF).
Full details of the methodology used in the estimation of child mortality for 2015 are available in the PLOS medicine collection on child mortality estimation methods
(Ploscollection.org/child mortality estimation)
World Health Organization. New-born: improving survival and well-being. 2020 [cited 2024 Aug [7].
https://www.who.int/news-room/fact- sheets/details/ new-borns-reducing-mortality
Lawn JE, Blencowe H, Oza S, you D, Lee AC, waiswa P, et al. Every new born: progress, priorities, and potential beyond survival. Lancet. 2014 Jul 12:384(9934):189-205.
Bhutta ZA, das JK, Bahl R, Lawn JE, salam RA, Paul VK, et al. Can available intervention end preventable deaths in mothers, new-borns babies and stillbirths, and at what cost? Lanct. 2014 July 26; 384(9940):347-70.
Ethical consideration
Ethical approval for this study was obtain from ethics committee for human research of Maganbhai Adenwala Mahagujarat University, Nadiad. (Approval no: MAM Uni / IECHR/2024/65) (Ref. no: IEC – MAM Uni / 2023-24/65).