A Study to Evaluate the Effectiveness of a Structured Teaching Programme on the Knowledge of Male Parents Regarding Newborn Care in a Community Setting in Kollam

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***Abstract*—Background: Newborn care is crucial for reducing neonatal morbidity and mortality. Traditionally, caregiving responsibilities have been centered around mothers, often neglecting the potential role of fathers in newborn care. In recent years, the involvement of male parents in early childcare has gained attention, recognizing their importance in promoting infant health and family well-being. The Primary objectives of the study were to evaluate the effectiveness of a structured teaching programme on the knowledge of male parents regarding newborn care in a community setting in Kollam. Research Methods was a pre-experimental one-group pre-test and post-test design was used. The study was conducted in selected communities of Kollam district. A total of 30 male parents of newborns were selected through purposive sampling. Data was collected using a structured questionnaire designed to assess knowledge on newborn care, including hygiene, breastfeeding, immunization, danger signs, and general newborn health practices. The structured teaching programme was implemented, and a post-test was conducted after seven days. Results were the findings revealed a significant increase in knowledge scores after the intervention. The mean post-test score was notably higher than the pre-test score, indicating that the structured teaching programme was effective in enhancing the knowledge of male parents regarding newborn care. Statistical analysis using paired t-test showed a significant difference at $p < 0.05$. The study concluded that structured teaching programmes can significantly improve male parents' knowledge of newborn care. Involving fathers in newborn health education can contribute positively to the overall health and development of infants. Community-level interventions targeting fathers should be encouraged to promote shared parental responsibility.**

***Index Terms*—Effectiveness, Structured teaching programme, Male parents, Parental knowledge, Newborn care, Community setting.**

I. INTRODUCTION

Background of the Study

The neonatal period, defined as the first 28 days of life, is a highly vulnerable time for an infant's survival and development. Globally, nearly 2.4 million newborns die each year, with the majority of these deaths occurring in low- and middle-income countries due to preventable causes such as infections, birth asphyxia, and prematurity-related complications. In India, despite notable progress in maternal and child health, neonatal mortality remains a major public health concern. Newborn care plays a vital role in ensuring the health and survival of infants. It encompasses various aspects such as breastfeeding, hygienic cord care, thermal protection, immunization, and early recognition of danger signs. While healthcare systems often focus on educating mothers about these practices, the role of fathers is frequently overlooked.

In traditional societies like India, fathers are typically seen as providers rather than caregivers. However, there is growing recognition of the positive impact that male involvement can have on child health outcomes. Studies have shown that when fathers are educated and actively involved in newborn care, it leads to improved practices at home, increased healthcare utilization, and better support for mothers during the postnatal period. Despite this, many male parents have limited knowledge about newborn care due to cultural norms, lack of exposure to health education, and minimal involvement in antenatal and postnatal services.

Addressing this knowledge gap through targeted educational interventions is essential.

Structured teaching programmes are an effective tool for imparting health education in a systematic and comprehensible manner. They can be used in community settings to reach populations that may not access formal health education services. This study was conducted in a community setting in Kollam district with the aim of evaluating the effectiveness of a structured teaching programme in enhancing the knowledge of male parents regarding newborn care. By focusing on fathers, the study hopes to contribute to a more inclusive approach to newborn health promotion and shared parenting responsibilities.

Statement of the problem

"A Study to Evaluate the Effectiveness of a Structured Teaching Programme on the Knowledge of Male Parents Regarding Newborn Care in a Community Setting in Kollam."

Objectives

- To assess the knowledge level of male parents regarding newborn care.
- To evaluate the effectiveness of a structured teaching programme on the knowledge of male parents regarding newborn care in a community setting.
- To find the association between selected demographic variables such as age, education, occupation, income, number of children,etc.and the pre-test knowledge scores of male parents.

Operational Definitions

- Effectiveness

  In this study, effectiveness refers to the measurable improvement in the knowledge scores of male parents regarding newborn care after the administration of the structured teaching programme, as determined by the difference between pre-test and post-test scores.
- Structured-Teaching-Programme

  A structured teaching programme refers to a systematically developed educational intervention designed by the researcher, consisting of organized content on newborn care (including hygiene, feeding, immunization, danger signs, etc.), delivered through lectures, visual aids, and discussions in the community setting.
- Male Parents

Male parents refer to biological fathers of newborns (0–1 month of age) residing in the selected community area of Kollam district, who are capable of understanding and responding to the questionnaire used in the study.

- Parental Knowledge

In this study, parental knowledge refers to the understanding and awareness male parents possess regarding essential aspects of newborn care, as measured by a structured knowledge questionnaire developed and validated by the researcher.

- Newborn Care

Newborn care refers to the basic practices and knowledge necessary for the health and well-being of infants from birth up to 28 days of life. It includes areas such as thermal protection, hygiene, feeding, immunization, identification of danger signs, and safe sleeping practices.

- Community Setting

A community setting refers to the selected rural and semi-urban residential areas within Kollam district where the study participants reside, and where the structured teaching programme was implemented outside a hospital or clinical setting.

Hypotheses

H_1: There will be a significant difference between the pre-test and post-test knowledge scores of male parents regarding newborn care after the implementation of the structured teaching programme at $p < 0.05$ level of significance.

H_2: There will be a significant association between the pre-test knowledge scores of male parents and selected demographic variables such as age, educational status, occupation, monthly income, and number of children at $p < 0.05$ level of significance.

II. MATERIALS AND METHODS

- Research Approach

The research approach used in this study was a quantitative evaluative approach, aimed at assessing the effectiveness of a structured teaching programme on male parents' knowledge regarding newborn care.

- Research Design

The study followed a pre-experimental one-group pre-test and post-test design.

In this design: A pre-test was conducted to assess the baseline knowledge of male parents. A structured teaching programme was administered. A post-test was conducted to assess the change in knowledge after the intervention.

- Variables

Independent Variable: Structured teaching programme on newborn care.
Dependent Variable: Knowledge level of male parents regarding newborn care.
Demographic Variables (Extraneous): Age, education, occupation, income, number of children, type of family, etc.

- Setting of the Study

The study was conducted in selected community areas of Kollam district, Kerala, where families with newborns reside. The teaching programme and data collection were carried out in a community-based setting such as local health centers and homes.

- Population

The target population for this study consisted of male parents (fathers) of newborns (0–1 month of age) residing in the selected community areas of Kollam.

- Sample

The sample included male parents who met the inclusion criteria and were available during the data collection period.

- Sample Size:

A total of 30 male parents were selected for the study.

- Sampling Technique:

purposive sampling technique was used to select the sample. Male parents who were willing to participate and met the inclusion criteria were selected.

- Criteria for Sample Selection

Inclusion Criteria:

- Male parents who have a newborn aged 0–1 month.
- Those who can read and understand Malayalam or English.
- Those who are willing to participate and give informed consent.
- Those who are available during the time of data collection.

Exclusion Criteria:

- Male parents who are healthcare professionals.
- Those who have already received any formal education or training on newborn care.
- Tool Used for Data Collection

A structured knowledge questionnaire was developed by the researcher to assess the knowledge of male parents regarding newborn care.
The tool included:

- Section A: Demographic profile including age, education, occupation, income and number of children,
- Section B: Structured knowledge questionnaire on newborn care, covering key areas such as: Breastfeeding and nutrition, Hygiene and cord care, Immunization, Identification of danger signs, Thermal protection, Sleep safety. Each correct answer was scored, and a total knowledge score was calculated. The tool was validated by subject experts and reliability was established using appropriate statistical methods (e.g., test-retest or split-half method).

DESCRIPTION OF TOOL

The data collection tool consisted of 2 sections developed to evaluate the effectiveness of knowledge of male parents regarding Newborn care in community setting area before and after the Structured Teaching Programme:
It consisted of 2 sections

- **Section A:** - Demographic proforma

This section collected background information such as: age, education, occupation, income and number of children.

- Section B: - Structured knowledge Questionnaire

DATA COLLECTION PROCESS

Section A: Demographic Profile
This section collected background information such as: age, education, occupation, income and number of children.
Section B: Structured Knowledge Questionnaire
Scoring: Each correct answer = 1mark, Total score = 30
Interpretation:

- 0–15: Inadequate knowledge
- 15–23: Moderate knowledge
- 23–30: Adequate knowledge

Content validity

Content validity refers to the extent to which the items in an instrument are representative of the entire domain the tool intends to measure.

In this study, content validity was established for the structured knowledge questionnaire designed to evaluate the effectiveness of a Structured Teaching Programme on the Knowledge of male Parents Regarding Newborn Care in a Community Setting in Kollam." The tool was developed based on an extensive review of literature, guidelines from authoritative sources and consultation with subject experts in neonatal nursing and paediatrics. and a content validation checklist was submitted to a panel of 6 experts. The panel included 2 Nursing experts, One gynaecologist, One paediatrician, One Malayalam language expert and One English language expert. Each item was assessed for relevance, clarity, and representativeness of the content. The Item-Level Content Validity Index ranged from 0.83 to 1.00, while the Scale-Level Content Validity was 0.94, indicating a high degree of content validity. Based on expert feedback, necessary revisions were made to enhance clarity, cultural appropriateness, and alignment with standard newborn care guidelines.

Reliability of the tool

Reliability refers to the consistency and stability of a measurement tool in producing similar results under consistent conditions. In this study, the reliability of the structured knowledge questionnaire was established to ensure that the tool yields consistent and dependable results when used with the target population.

In this study assessed the reliability to ensure consistency and dependability of the structured knowledge questionnaire, the reliability of the tool was established using the test-retest method. The questionnaire was administered to a sample of 10 male parents who met the inclusion criteria but were not part of the main study sample. The same tool was re-administered to the same group after a gap of **seven days** under similar conditions. The responses were analysed to assess the stability of the instrument over time. The reliability coefficient was calculated using Karl Pearson's correlation coefficient, which yielded a value of **r = 0.86**, indicating a high level of reliability. This result confirms that the tool consistently measures the knowledge of male parents regarding newborn care and can be considered a reliable instrument for data collection in the present study.

Data collection process

Data collection refers to the identification of subjects and precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypothesis of the study.

Data Collection Process in this study refers to the systematic and organized procedure through which information is gathered from selected male parents at community area, Kollam district, Kerala. To assess their knowledge regarding the care of Newborn babies (NB) before and after the implementation of a structured teaching programme.

Ethical consideration

Prior to data collection, ethical approval was obtained from the Institutional Ethical Committee of the affiliated institution. Formal permission was also obtained from the concerned local authorities in the selected community setting in Kollam.

Informed Consent

The researcher introduced herself to the subjects and provided a brief introduction about research. Written informed consent was obtained from all participants after providing detailed information about the purpose of the study, procedures involved, potential benefits, and their right to withdraw at any stage without any negative consequences.

Collection of Data

The data collection for this study was carried out in a systematic and organized manner in selected community areas of Kollam district. Before initiating data collection, necessary approvals were obtained from the institutional ethical committee and local community authorities. A structured knowledge questionnaire and a validated teaching module were prepared for use in the study. A purposive sampling technique was used to select male parents who met the inclusion criteria. Participants were informed about the study, and written informed consent was obtained. A structured questionnaire was administered to the participants to assess their baseline knowledge regarding newborn care in pre-test. Following the pre-test, the intervention of a structured teaching programme was implemented. The session included interactive teaching using charts, flipbooks, and verbal instruction, covering essential topics such as breastfeeding, hygiene, immunization, thermal

protection, and danger signs in newborns. After a period of 7 days, post-test was done the same questionnaire was re-administered to the participants to assess the effectiveness of the teaching programme in improving their knowledge. All responses were collected, coded, and entered into a data sheet for further analysis. Participant confidentiality was strictly maintained throughout the data collection process.

Data analysis Process

Data analysis refers to the method of organizing data in such a way that research questions can be answered and hypothesis can be tested.

The data collected through the structured knowledge questionnaire were systematically organized, coded, and entered into a Microsoft Excel spreadsheet and then analysed using Statistical Package for the Social Sciences (SPSS)

The analysis was carried out as follows:

- Descriptive-Statistics**:**
  Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize the demographic characteristics of the participants and to assess their knowledge scores before and after the intervention.
- Inferential-Statistics**:**
  To evaluate the effectiveness of the structured teaching programme:
- A paired t-test was used to compare the pre-test and post-test knowledge scores of the participants.
- A p-value < 0.05 was considered statistically significant.
- Data-Presentation**:**
  The results were presented in the form of tables, graphs, and charts to facilitate easy interpretation and comparison. This approach helped determine the impact of the teaching intervention on the knowledge of male parents regarding newborn care in a community setting.

III. RESULT

Section A: Description of sample characteristics

This section deals with the percentage distribution of sample characteristics such as Age, Religion, Education, Occupation, Type of Family and Number of children

Graphical representation of demographic variables.

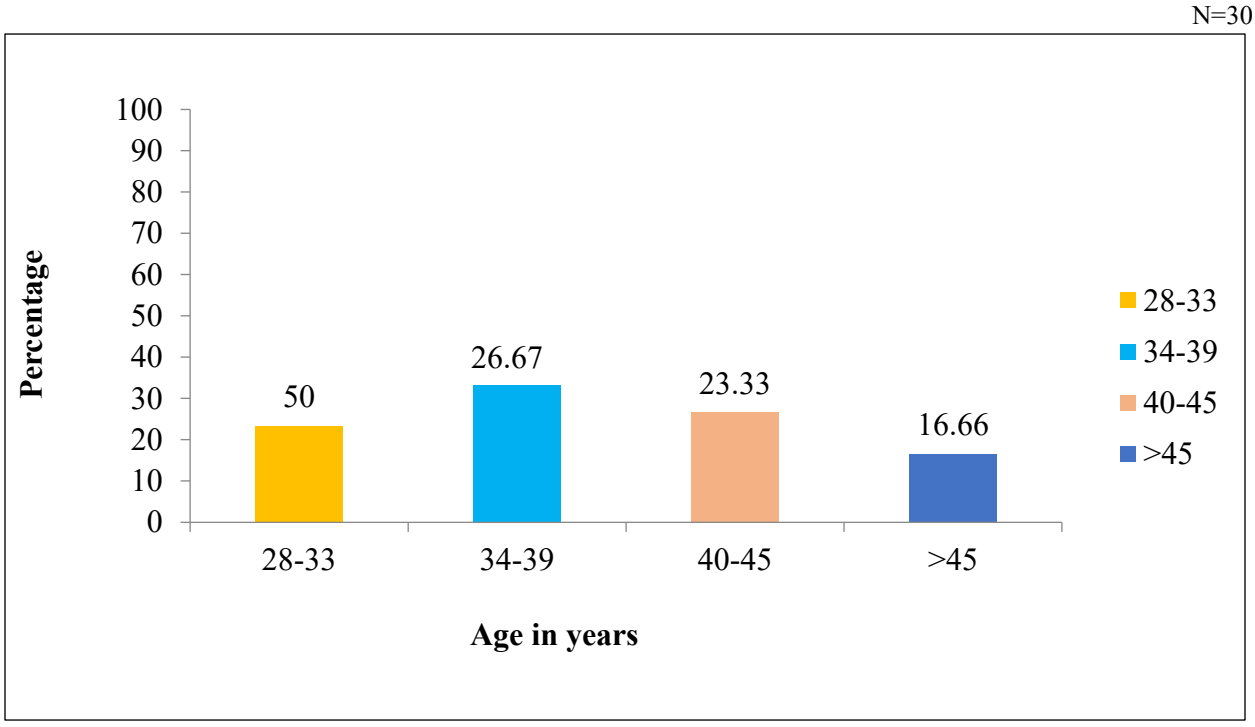

Figure 1: Percentage wise distribution of sample according to Age.

The data in the figure 1 shows that in experimental group, 50% of the sample belongs to the age group 28-33 years, 26.67% belongs to the age group 34-39 years, 23.33% belongs to 40-45 and 16.66% belongs to the age group >45 years.

N=30

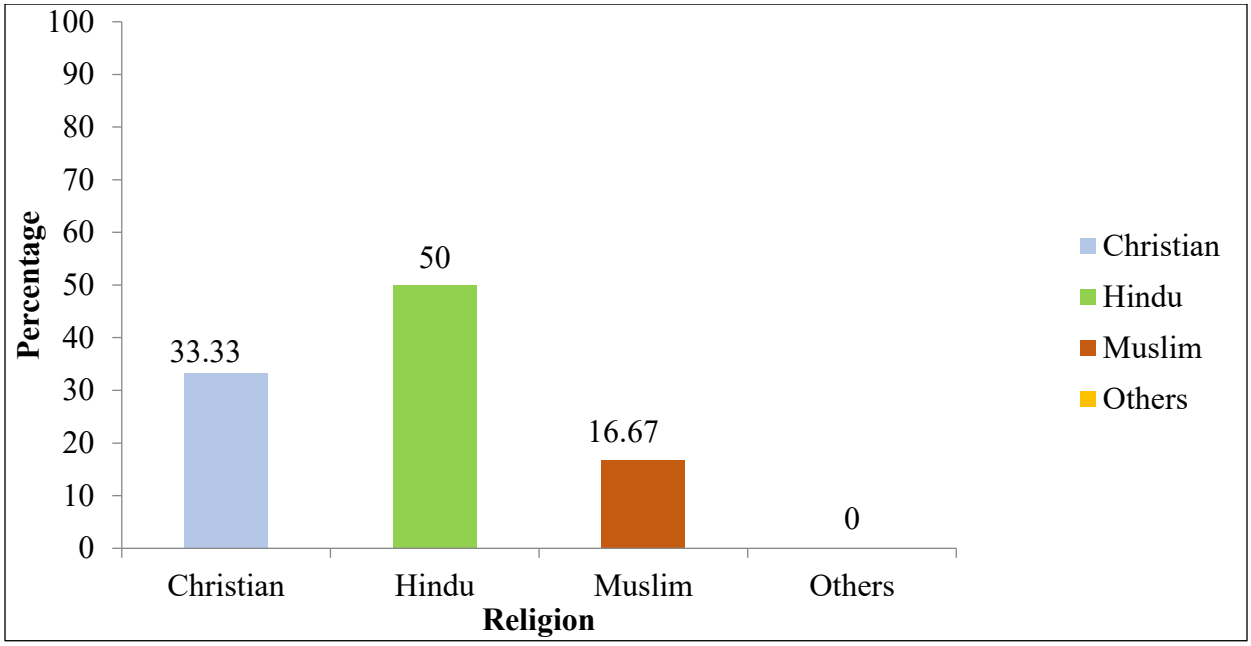

Figure 2: Percentage wise distribution of sample according to Religion.

The data in the figure 2 shows that in experimental group, 33.33% of the sample belongs to Christian family, 50% belongs to Hindu family, and 16.67% of sample belongs to Muslim family

N=30

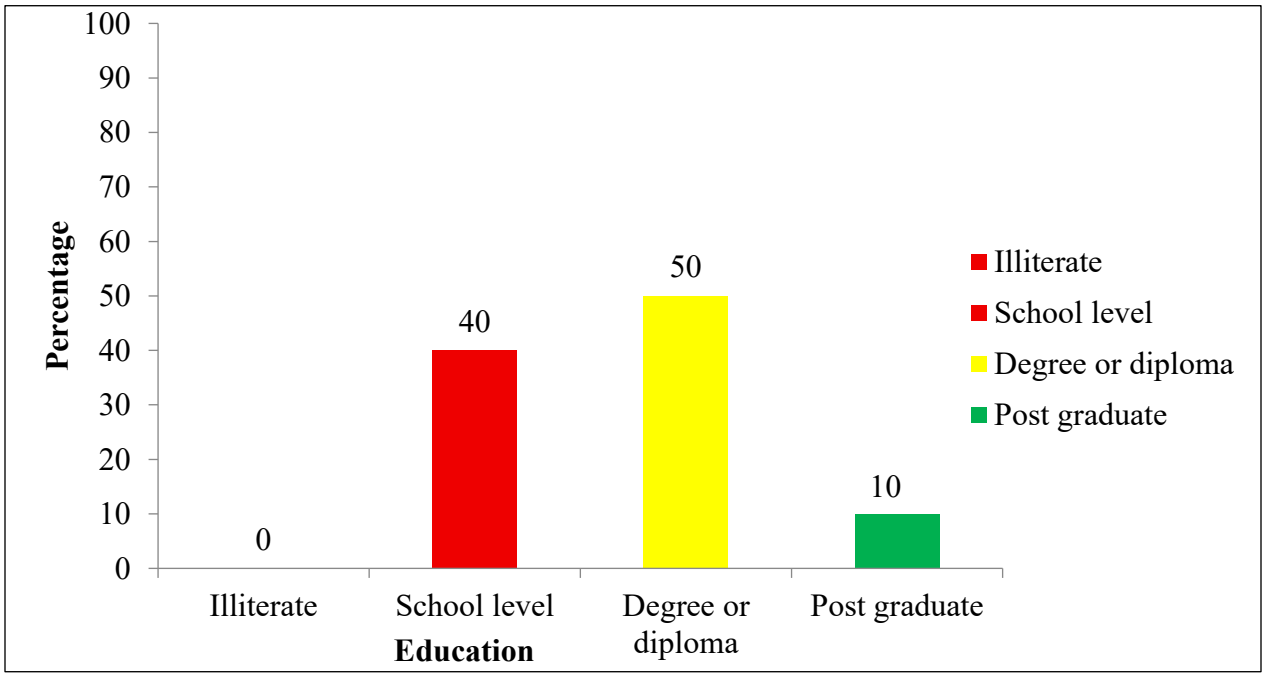

Figure-3: Percentage wise distribution according to education

The data in the figure 3 shows that in the experimental group, 40% sample had education up to school level, 50% of sample had degree or diploma education and 10% of sample had post graduate degree.

N=30

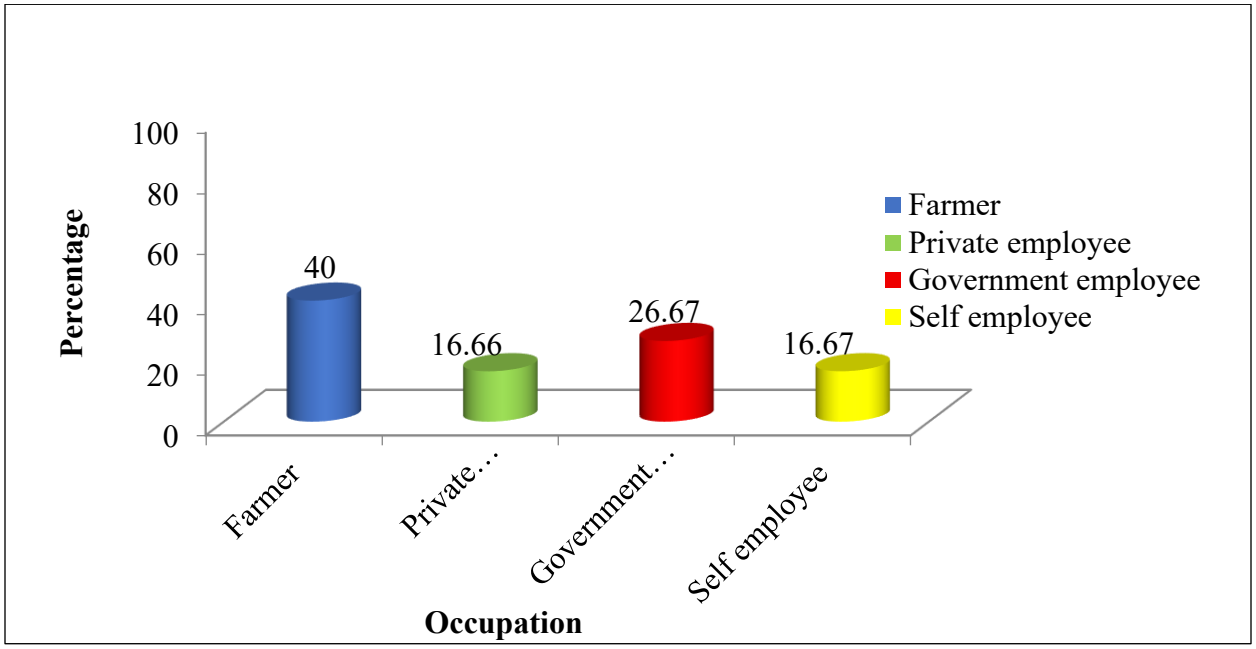

Figure-4: Percentage wise distribution according to occupation

The data in the figure 4 shows that in the experimental group, 40% sample were Farmers 16.66% were private employees 26.67%of the sample were government employees and 16.67% were self- employed.

N=30

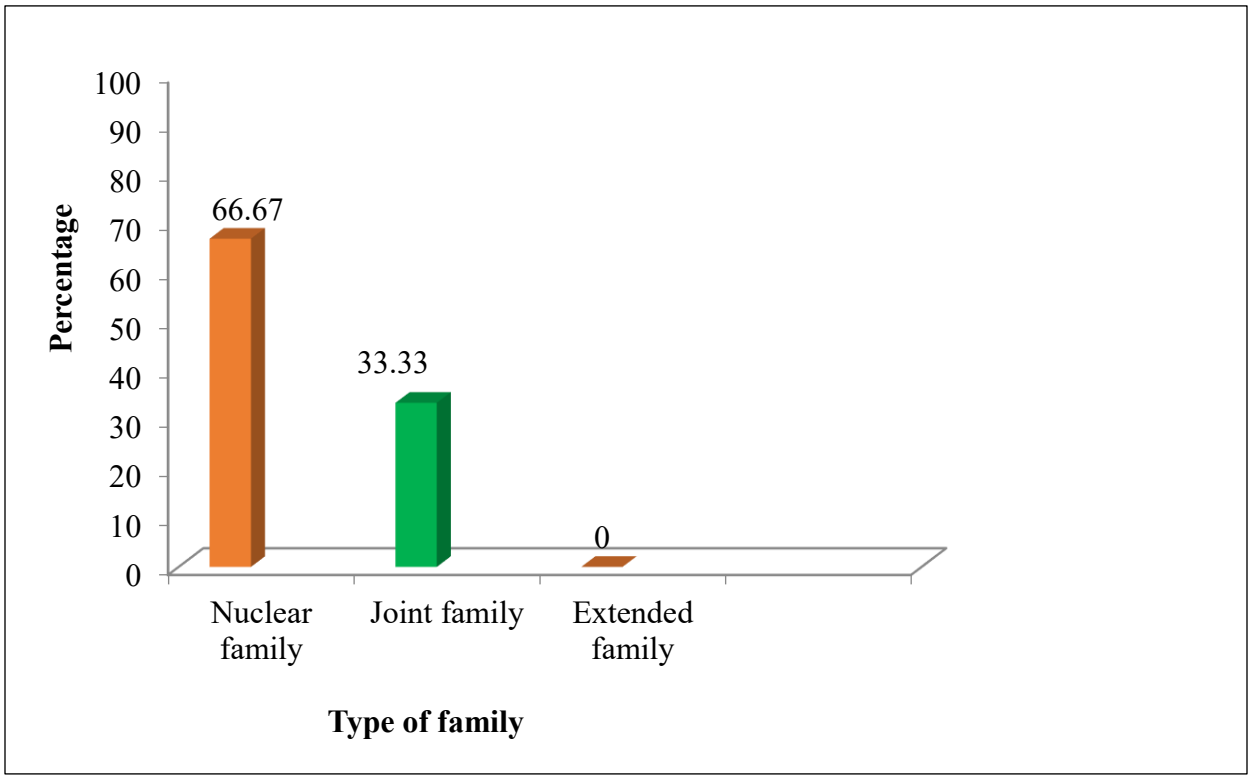

Figure-5: Percentage wise distribution according to Type of family.

The data in the figure 5 shows that, in experimental group, 66.67% of sample belongs to nuclear family and 33.33% of sample belongs to Joint family and no extended family.

N=30

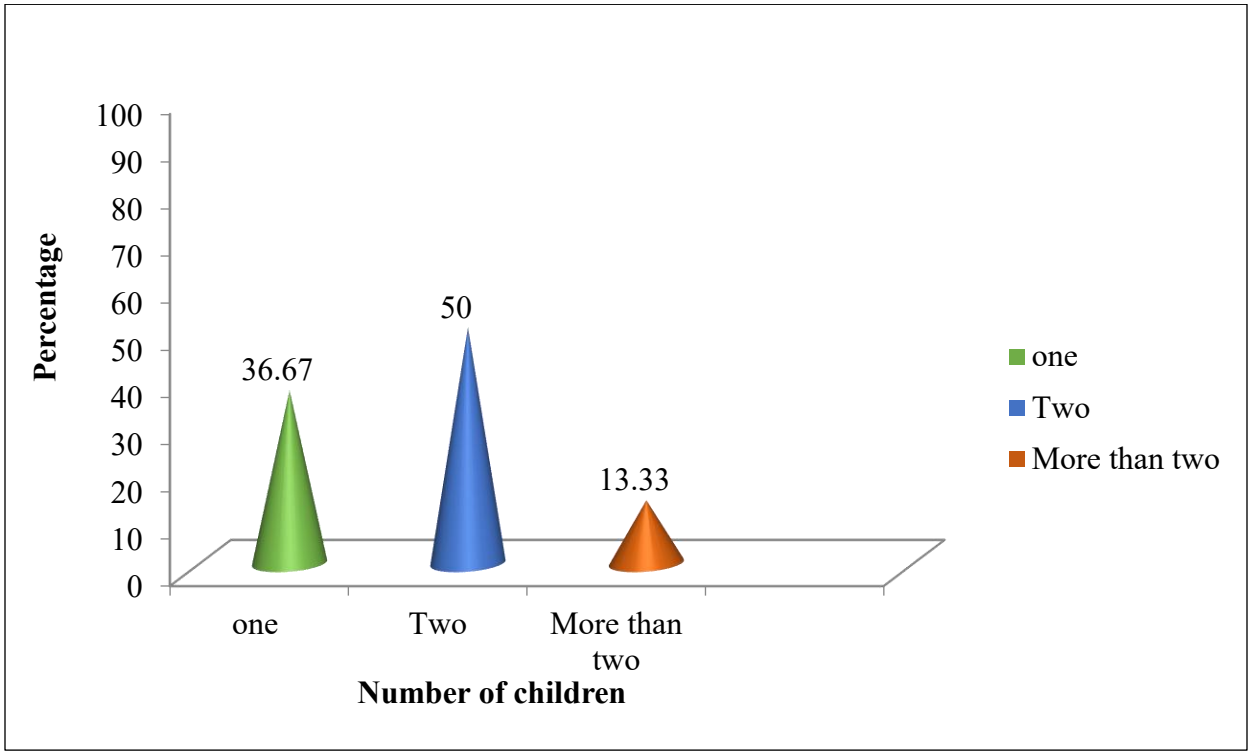

Figure-6: Percentage wise distribution according to Number of children

The data in the figure 8 shows that in the experimental group, 36.67% of sample had single child and 50% of sample had two children and 13.33% of sample had more than two children

Section B: Effectiveness of a Structured Teaching Programme on the Knowledge of Male Parents Regarding Newborn Care in a Community Setting in Kollam."

Table1: Description of pretest knowledge score regarding newborn care among male parents in experimental group.

N=30

Pretest Knowledge score	Experimental group	
	Frequency	Percentage
Inadequate knowledge	4	13.33
Moderate knowledge	24	80
Adequate knowledge	2	6.67

Data in the table 1 shows that in the pretest knowledge of male parents regarding the newborn care in experimental group, 13.33% (n = 4) of sample had inadequate knowledge, 80% (n = 24) of sample had moderate knowledge and 6.67% (n = 2) of sample had adequate knowledge regarding administration of pediatric medication in pretest.

Table 2: Description of post-test knowledge score regarding newborn care among male parents in experimental group.

N=30

Postest Knowledge score	Experimental group	
	Frequency	Percentage
Inadequate knowledge	1	3.33
Moderate knowledge	12	40.00
Adequate knowledge	17	56.67

Data in the Table 2 shows that the post-test knowledge scores among male parents in the experimental group regarding newborn care after intervention 3.33% (n = 1**)** of participants had inadequate knowledge**.** 40% (n =12**)** had moderate knowledge, and 56.67% (n =17) achieved adequate knowledge. This indicates a significant improvement in knowledge levels following the intervention. The number of participants with adequate knowledge increased from 6.67% in the pretest to 56.67% in the post-test**,** while those with inadequate knowledge decreased from 13.33% to 3.33%**.**

Table 3: Mean, SD and t value of pre-test and post-test knowledge score of male parents regarding administration of newborn care in experimental group.

N=30

Knowledge scores	Mean	S D	t' value	Significance
Pre test	7.67	2.21	6.58	S
Posttest	10.67	2.81		

Table value t (29) =2.05 S=Significant

Data in the table 3 revealed that the mean pretest knowledge score was 7.67 with standard deviation 2.21 and posttest knowledge score was 10.67 with standard deviation 2.81 in experimental group. The calculated 't'value (6.58) is greater than table t value (2.05) at 0.05 level of significance, hence hypothesis **H1**- There will be a significant difference between the pre-test and post-test knowledge scores of male parents regarding newborn care after the implementation of the structured teaching programme at $p < 0.05$ level of significance and in experimental group-was accepted.

H_2: There will be a significant association between the pre-test knowledge scores of male parents and selected demographic variables such as age, educational status, occupation, monthly income, and number of children at $p < 0.05$ level of significance.

Section C: Association between pretest knowledge score regarding newborn care among male parents and selected demographic variables.

Table 4: Association between pretest knowledge scores with selected demographic variables such as Age, Religion, Education, Occupation, Type of family, Number of children regarding newborn care among male parents and selected demographic variables.

N=30

Sl. No	Demographic variables	Knowledge			Calculated Chi square	Df	Table Value	Level of significance
		Inadequate	Moderate	Adequate				
1.	Age in years							
a.	20-25	5	2	4	2.088	4	9.44	NS
b.	26-35	3	4	3				
c.	36-45	5	2	2				
d.	45 above	0	0	0				
2.	Religion							
a.	Christian	6	1	3	2.11	4	9.44	NS
b.	Hindu	5	4	2				
c.	Muslim	5	2	2				
d.	Others	0	0	0				
3.	Education							
a.	Illiterate	0	0	0	10.88	4	9.48	S
b.	School level	2	1	1				
c.	Degree and Diploma	0	2	3				
d.	Post graduate	1	15	5				

Sl. No	Demographic variables	Knowledge			Calculated Chi square	Df	Table Value	Level of significance
		Inadequate	Moderate	Adequate				
4.	Occupation							
a.	Farmer	5	1	1	13.63	6	12.5	S
b.	Private employee	2	5	2				
c.	Government Employee	0	6	2				
d.	Self-employee	0	4	2				
5.	Type of family							
	Nuclear family	5	2	4	2.008	4	9.44	NS
	Joint family c. Extended family	3 5	4 2	3 2				

P<0.05levelofsignificance S-Significant NS-Not significant

The association between pretest knowledge score with selected demographic variables was assessed using chi-square test. The data in the table 9 shows that the calculated chi-square value of all demographic variables except education were less than table value at 0.05 level of significance. There was no significant association between pretest knowledge score and selected demographic variables such as age, religion, occupation, type of family, number of children. There was significant association between pretest knowledge score and the demographic variable ‘education and occupation. Hence hypothesis H2: - There will be significant association between the pretest knowledge score regarding newborn care among male parents and selected demographic variables. was partially accepted.

IV. DISCUSSION

This study demonstrated a significant improvement in the knowledge levels of male parents regarding newborn care following the implementation of a structured teaching programme. The marked increase in post-test scores compared to pre-test scores clearly indicates the effectiveness of the educational intervention in enhancing paternal knowledge. These findings support the growing body of literature advocating for structured, evidence-based educational programmes as a means to improve parental preparedness, as also observed in previous studies by Kushwaha et al. (2018) and Dency C D (2025).

The inclusion of fathers in newborn care education marks a pivotal shift from traditional maternal-centric approaches. Historically, most educational interventions have focused primarily on mothers, often underestimating the role of fathers in early childcare. This study adds to the limited but growing evidence that fathers, when given appropriate knowledge and support, can contribute significantly to the health and well-being of their newborns. Involving fathers not only improves knowledge outcomes but may also foster shared parenting responsibilities, enhance paternal bonding, and reduce the burden on mothers, particularly in the postpartum period.

The results also highlight the receptiveness of male parents to structured learning interventions. Despite cultural or societal expectations that often marginalize paternal involvement in newborn care, this study suggests that fathers are willing and capable participants when given the opportunity. This finding has practical implications for healthcare providers and policymakers who design family-centred educational interventions. However, some limitations must be acknowledged. The study utilized a localized sample,

which may limit the generalizability of the findings. Cultural beliefs, literacy levels, and access to healthcare resources can vary widely between regions, and these factors may influence both baseline knowledge and the effectiveness of educational programmes. Additionally, the short follow-up period restricts the ability to assess the long-term retention of knowledge or its translation into practical caregiving behaviors.

Future research should address these limitations by incorporating a larger, more diverse sample and employing longitudinal designs to assess sustained knowledge retention and behavioural changes over time. Moreover, studies could explore the direct impact of paternal education on measurable infant health outcomes, such as immunization rates, nutritional status, and frequency of healthcare visits. Incorporating qualitative assessments could also provide richer insights into the attitudes, challenges, and motivations of fathers in caregiving roles.

In conclusion, this study reinforces the importance of inclusive, structured educational interventions in equipping both parents and particularly fathers with essential knowledge for newborn care. By recognizing the evolving dynamics of modern parenthood, such interventions can contribute to improved family health practices and ultimately, better health outcomes for infants.

V. COMPARISON WITH PREVIOUS STUDIES

The findings of the present study revealed a statistically significant improvement in the knowledge of male parents regarding newborn care following the structured teaching programme. This is consistent with the study conducted by Sheela Kushwaha and Bijiya Mohanta (2018)**,** which showed that structured teaching programmes significantly improved the knowledge of primipara mothers regarding newborn care. Similarly, Dency C D (2025) reported that structured antenatal education sessions in Kerala resulted in improved awareness of essential newborn care practices among pregnant women, supporting the effectiveness of planned educational interventions. In a related study by T. Pavithra and S. Sujitha (2019)**,** postnatal mothers who received structured education showed significantly higher post-test scores than those who did not, highlighting the universal applicability of structured teaching in different parent populations. However, unlike these studies that focused predominantly on mothers, the present study involved male parents, who are often neglected in newborn care education. The positive outcome in this population suggests that fathers are equally receptive to structured learning when given the opportunity. This expands the scope of similar programmes and highlights the need for inclusive educational strategies that target both parents.

The results also align with the World Health Organization's emphasis on male involvement in maternal and child health, as a means of improving newborn outcomes through shared responsibility.

VI.. CONCLUSION

The present study aimed to evaluate the effectiveness of a structured teaching programme on the knowledge of male parents regarding newborn care in a community setting in Kollam. The findings revealed a significant improvement in the knowledge scores of male parents following the educational intervention. This indicates that structured teaching is an effective method to enhance awareness and understanding of essential newborn care practices among fathers. Traditionally, most newborn care education has focused on mothers, leaving fathers under-informed and under-involved. This study highlights the importance of including male parents in educational initiatives to promote shared responsibility and improve newborn health outcomes.

The structured teaching programme proved to be a practical and impactful tool for bridging the knowledge gap among male parents. Based on the findings, it is recommended that similar programmes be incorporated into routine community health education to ensure the involvement of both parents in newborn care.

VII. LIMITATIONS OF THE STUDY

The study was conducted on a limited number of male parents from a specific community in Kollam, which may restrict the generalizability of the findings to larger or more diverse populations. The research was confined to a particular community setting in Kollam, and the results may not reflect the knowledge levels or needs of male parents in other regions or urban settings. The effectiveness of the structured teaching

programme was assessed only in the short term (immediate post-test). Long-term retention of knowledge and actual behavioural changes in newborn care practices were not evaluated. The data on knowledge was collected using a self-reported structured questionnaire, which may be subject to response bias or overestimation of knowledge levels. The study did not include a control group for comparison, which limits the ability to attribute improvements solely to the teaching programme. The study assessed only knowledge and did not evaluate actual practices or skills related to newborn care, which are crucial for real-world outcomes.

VIII. RECOMMENDATIONS FOR FUTURE RESEARCH

Future research should include a larger sample size across multiple geographic locations to improve the generalizability of findings. Using a control group in future studies would help compare outcomes more effectively and establish a clearer cause-and-effect relationship between the structured teaching programme and knowledge improvement. Follow-up studies should be conducted to evaluate whether the knowledge gained through structured teaching is retained over time and leads to actual changes in caregiving practices. Future research should not only assess knowledge but also evaluate how well male parents apply the information in real-life newborn care situations. Combining quantitative data (knowledge scores) with qualitative data (interviews, observations) can provide a deeper understanding of participants' attitudes, experiences, and barriers to learning. Studies can be done to compare the effectiveness of traditional teaching programmes with digital or app-based modules tailored for male parents. Research comparing the outcomes of educating fathers alone versus educating both parents together could offer insights into family-centred care approaches. Longitudinal studies could investigate how improved paternal knowledge influences newborn health metrics such as immunization rates, hygiene, and breastfeeding support.

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REFERENCES

[1] Kushwaha, S., & Mohanta, B. (2018). Effectiveness of structured teaching programme on the knowledge regarding newborn care among primipara mothers. IOSRJournalofNursingandHealthScience,7(5),38–43https://doi.org/10.9790/1959-0705063843

[2] Dency, C. D. (2025). Effectiveness of structured teaching programme on knowledge regarding newborn care among women attending antenatal clinics of selected hospitals in Kerala. *I*nternational Journal of Advanced Research in Education & Social Management, 11(6). https://www.ijaresm.com/effectiveness-of-structured-teaching-programme-on-knowledge-regarding-newborn-care

[3] Pavithra, T., & Sujitha, S. (2019). The effectiveness of structured teaching programme on essential newborn care among postnatal mothers. International Research Journal of Engineering and Technology (IRJET), 6(11). https://www.irjet.net/archives/V6/i11/IRJET-V6I1148.pdf

[4] Mathew, A., Babu, A., Samson, P., Philip, S., Verghese, V., & Antony, P. (2021). A study to assess the effectiveness of structured teaching programme on knowledge regarding the first aid management of convulsion in children among primary school teachers of selected schools at Kollam. Asian Journal of Nursing Education and Research, 11(2), 173–175. https://doi.org/10.52711/2349-2996.2021.00122

[5] Ngai, F. W., Chan, S. W. C., & Ip, W. Y. (2014). Effects of a childbirth psychoeducation program on learned resourcefulness, maternal role competence and perinatal depression: A randomized controlled trial. International Journal of Nursing Studies, 51(9), 1297–1306. https://doi.org/10.1016/j.ijnurstu.2014.02.007

[6] Gupta, R. K., & Sachdeva, A. (2021). Knowledge, attitude and involvement of first-time fathers in infant and young child feeding and care practices. Indian Paediatrics, 58(8), 721–723. https://www.indianpediatrics.net/aug2021/721.pdf

[7] Story, W. T., Burgard, S. A., Lori, J. R., Taleb, F., Ali, N. A., & Hoque, D. M. E. (2012). Men's knowledge and awareness of maternal, neonatal

and child health care in rural Bangladesh: a comparative cross-sectional study. BMC Public Health, 12(1), 1–12. https://doi.org/10.1186/1471-2458-12-841

[8] Aryal, R. K., & Regmi, M. C. (2022). Knowledge regarding care of the first newborn baby among fathers attending a tertiary level maternity hospital of Nepal. Journal of Family Medicine and Community Health, 9(1). https://www.jscimedcentral.com/FamilyMedicine/familymedicine-9-1311.pdf

[9] Mihret, M. S., Wubetu, A. D., & Alemu, F. M. (2024). Male involvement in infant care and associated factors among infants less than one year in Bibugn district of Ethiopia: A community-based cross-sectional study. BMC Pediatrics, 24(1). https://doi.org/10.1186/s12887-024-04264-8

[10] Zimba, A. N., Chimwaza, A. F., & Chavula, K. (2023). Factors influencing fathers' involvement in the care of hospitalized preterm newborns in Balaka, Malawi. BMC Pediatrics, 23(1), 1–10. https://doi.org/10.1186/s12887-023-04253-1

[11] Loke, A. Y., & Chan, S. S. (2014). Effects of newborn care education for first-time fathers on their knowledge and confidence in newborn care at postpartum one month. *Midwifery, 30*(2), 254–261. https://doi.org/10.1016/j.midw.2013.07.005

[12] Patil, R. S., & Patil, V. D. (2019). Comparative study to assess the knowledge regarding newborn care between mother and father in selected hospitals of Pune city. International Journal of Nursing Research, *5*(3), 21-26. https://innovationaljournals.com/index.php/ijnr/article/view/153

[13] Aryal, R. K., & Regmi, M. C. (2022). Knowledge regarding care of the first newborn baby among fathers attending a tertiary level maternity hospital of Nepal. Journal of Family Medicine and Community Health, *9*(1), 1311. https://doi.org/10.24966/FAM-8662/1001311

[14] Kazemi, A., & Mohammad, A. (2023). Fathers' educational needs assessment in relation to their participation in perinatal care: A systematic review. *Healthcare, 11*(2), 200. https://doi.org/10.3390/healthcare11020200

[15] Yargawa, J., & Leonardi-Bee, J. (2015). Fathers' roles in care seeking for maternal and newborn health: a qualitative study in Morogoro Region, Tanzania. BMC Pregnancy and Childbirth, 15, 269. https://doi.org/10.1186/s12884-015-0705-4

[16] Zimba, A. N., Chimwaza, A. F., & Chavula, K. (2023). Factors influencing fathers' involvement in the care of hospitalized preterm newborns in Balaka, Malawi. BMC Pediatrics, *23*, 253. https://doi.org/10.1186/s12887-023-04253-1

[17] Awuni, J. A., & Duah, H. O. (2023). Perceptions of male caregivers involved in managing newborn illnesses at home and in healthcare facilities in Salaga District of Ghana. BMC Pediatrics, *23*, 402. https://doi.org/10.1186/s12887-023-04269-8

[18] Feeley, N., & Letourneau, N. (2023). The role of fathers in supporting the development of their NICU infant. Early Human Development, *183*, 105265. https://doi.org/10.1016/j.earlhumdev.2023.105265

[19] Singh, P., & Kumar, S. (2024). Indian fathers' perceptions of young childcare and feeding: A qualitative study. Children and Youth Services Review, *156*, 106995. https://doi.org/10.1016/j.childyouth.2024.106995

[20] Dash, S. S., & Samal, S. (2023). Do the fathers matter? Paternal perspective of exclusive breastfeeding practices: A community-based cross-sectional study in urban slums of Bhubaneswar, Odisha. Journal of Family Medicine and Primary Care, *12*(1), 123-128. https://doi.org/10.4103/jfmpc.jfmpc123-23