



EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING FIRST AID MANAGEMENT OF FOREIGN BODY ASPIRATION AMONG PARENTS OF UNDER FIVE CHILDREN IN SELECTED AREAS: A STUDY PROTOCOL

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ABSTRACT

Background: In countries such as India, Brazil, and Egypt, the children are more likely to die before attaining the age of 5 years. In India 70.2% population belong to less than 5 years of age, among these most are within 2–3 years of age. Airway foreign body is predominantly a problem of younger children. **Objective:** To assess the effectiveness of structured teaching programme on knowledge regarding first aid management of foreign body aspiration among parents of under five children in selected areas. **Methodology:** Pre experimental one group pre-test post-test research design will be used. Duration of study will be one month. 70 parents of under five children from selected community areas of Nagpur district will be selected as a sample through non probability convenience sampling technique. The self-structured questionnaire will be used to assess the knowledge. Validity and reliability of the tool will be determined with appropriate standardized methods. **Expected Results:** Knowledge will enhance after structured teaching programme. **Limitation:** Only parents of under five children of selected community areas of Nagpur district will be included in this study. **Conclusion:** The results of this study will contribute to empower parents of under five children in terms of knowledge regarding first aid management of foreign body aspiration. Structured teaching programme will be effective method to enhance knowledge of parents.

KEYWORDS : First aid management, Foreign body aspiration, Under five children, Structured teaching programme.

INTRODUCTION

A home without children is place where, there is no life or soul. The development of children is basically affected by what happens to their health status during early years of life. Children are always precious to their parents, but they are also very significant to the nation because they make the next generation. Childhood is a wonderful phase in one's life. It's time to let loose and explore various things. With all it's great moments, Mild illnesses are a part of growing up and there is not a lot that we can do to avoid them, but a basic awareness of the common health issues faced by children can guide parents and address their concerns.¹

"Foreign body aspiration is defined as the inhalation of foreign bodies/objects into the respiratory tract." It commonly occurs among paediatric populations, most commonly at the age of 6 months to 4 years, airway foreign bodies can become lodged in the larynx, trachea, and bronchus. A broad range of foreign bodies have been reported in the literature; The most frequently aspirated foreign bodies are toys, sweets, batteries, rocks, coins, marbles, pins, pencil, erasers, buttons, peanut, screws, magnets or other small food items etc. Prevention of aspiration of foreign bodies is better than the cure. Prevention is the key in reducing morbidity due to foreign body aspiration for that more effort in the caregiver's education is needed about the first aid.²

The primary goal of first aid management is to improve quality of health care for children and their families. If the object is large enough to cause nearly complete obstruction of the airway, asphyxia may rapidly cause death, aspiration and ingestion of foreign bodies in the windpipe and food pipe are the common accidents in the childhood. 80% of paediatric foreign body aspiration occurs in 0-3 years, most of the accidents happens at the home, however 40% of them occurs without parents witnessing.³

A Study conducted by Pradeep Kumar Yadav, Kailash Khandelwal et. al. in the year 2019 in urban community of Jaipur, India to assess the effectiveness of planned teaching programme on knowledge regarding foreign body aspiration

among mothers of toddler. Sample of the study was 60 mothers of toddlers. Study results showed that pre-test knowledge score among mothers of toddler depicts that, majority 57 (95%) of mothers had inadequate knowledge scores and 1 (1.67%) of them had moderate knowledge scores, and 2 (3.33%) had adequate knowledge. The finding of the study showed that their mean post -test knowledge score (18.4%) was significantly higher than their mean pre-test knowledge score (10.95%). The finding of the study has revealed that there was an urgent need to educate the mothers of toddler regarding foreign body aspiration.⁴

A descriptive and quantitative cross-sectional study was conducted by Blenda Avelino Soares, Nader Alziro Kassem Fares et. al. in 2020 in Brazil to analyse the knowledge of parents and caregivers about foreign body aspiration in children. The sample were 417 parents and caregivers of children from out patient department. Study results showed that about a third (33.8%) of the parents and caregivers lack of knowledge about foreign body aspiration. Deficiencies were seen mostly in preventive measures and symptoms of foreign body aspiration.⁵

As per the recommendations of above studies, parents having lack of knowledge regarding first aid management of foreign body aspiration and there is urgent need of effective teaching strategies regarding first aid management for parents to rescue their children from an emergency situation, early reach in time for intervention, reducing mortality and it's complications.

OBJECTIVES

1. To assess knowledge regarding first aid management of foreign body aspiration among parents of under five children in selected areas.
2. To assess the effectiveness of structured teaching programme on knowledge regarding first aid management of foreign body aspiration among parents of under five children in selected areas.
3. To associate the study findings with selected demographic variables.

Hypothesis

H₀-There is no significant difference between the pre-test and post-test knowledge score of structured teaching programme regarding first aid management of foreign body aspiration among parents of under five children.

H₁-There is significant difference between pre-test and post-test knowledge score of structured teaching programme regarding first aid management of foreign body aspiration among parents of under five children.

MATERIAL AND METHODS

Study Design: Pre-experimental one group pre test- post test research design will be used for the study.

Study Setting: This study will be conducted in selected areas of Nagpur district, Maharashtra, India.

Participants: The participants will be 70 parents of under five children.

Sample Size Calculation**Formula Used:**

$$n = N * X / (N + X - 1),$$

Where

$$X = Z_{\alpha/2}^2 * \sigma^2 / MOE^2,$$

Where:

$Z_{\alpha/2}$ is the critical value of the Normal distribution at $\alpha/2$ (e.g. for 95% CI, critical value is 1.96),

MOE is the margin of error 5%,

σ^2 is the population variance = 400,

N is the population size = 1000.

the required sample size = 58

Adding 10% non-response rate, the required sample size = 64 rounded to 70.

Sampling Technique

Non probability convenience sampling.

Inclusion Criteria

1. Parents of under five children who will give consent to participate in study.
2. Can read, write and comprehend Hindi and Marathi.

Exclusion Criteria

1. Parents of under five children who have previously participated in training regarding first aid management of foreign body aspiration
2. Parents of under five children who are health care professionals.

Variables

Independent Variable: Structured Teaching Programme.

Dependent Variable: Knowledge.

Data Collection Tool

Section A: It will consist of socio demographic profile of parents of under five year children.

Section B: It will consist self- structured knowledge questionnaire on first aid management of foreign body aspiration.

Description Of Tool And Knowledge Assessment

The tool will consist of structured teaching programme on first aid management of foreign body aspiration among the parents of the under five children. A self-structured questionnaire will be prepared by the investigator and administered to selected 70 parents of the under five children. The structured teaching programme includes adequate information regarding first aid management of foreign body aspiration among parents of under five children. Structured teaching programme will be conducted for 45 minutes. All subjects will be requested to solve questionnaire and return to the investigator. i.e. post-test to check their knowledge regarding first aid management of foreign body aspiration among the parents of the under five children. Data collected will be analysed by descriptive and inferential statistics. Parents knowledge will be assessed by pre and post-test using

self structured multiple-choice questions regarding first aid management of foreign body aspiration. Validity and reliability of tool will be assessed by appropriate statistical measures. Validity over the questionnaire will be established for build up through both the construct & content manner to seek for the results what has intended purposely for the inferences & conclusion to measure. Knowledge assessment will consider poor if the score is < 33 %, Average if it is 33.01 to 66 %, and Good if it is > 66.01%.

Description of Intervention

The intervention is structured teaching programme designed to enhance knowledge of parents of under five children regarding first aid management of foreign body aspiration. The programme will aim equip parents with the necessary knowledge to early identify sign and symptoms of foreign body aspiration and provide appropriate intervention. The programme will make use of realistic scenarios and power point presentation and banner. The structured teaching programme will involve interactive lectures and discussion. The lectures cover the concept, causes, early identifying sign and symptoms and first aid management of foreign body aspiration. The panel of experts from community and paediatric health nursing will judge the content validity of teaching programme for relevancy and adequacy of content. Pilot study will be conducted to assess the reliability of structured teaching programme.

Study Procedure And Data Collection

The protocol of the study was approved by IEC (GMC/ IEC/ 2022-23/1665 dated 05.08.22). Permission to conduct the study shall be taken from relevant community stakeholders. Parents of under five children who fulfil inclusion criteria shall be assigned to the study. Written informed consent will be taken from the participants. Each participant will receive a code number. A self- structured questionnaire will be used to obtain information on the socio-demographics of participants. Thereafter, baseline knowledge will be assessed. Ensuring proper spacing of participants in research studies is a common practice to minimize the potential for copying or sharing information during data collection. This approach helps maintain the integrity and validity of the study results. Thereafter, a structured teaching program on first aid management of foreign body aspiration will be administered for the participants on the same day. After seven days post-test for knowledge assessment will be conducted.

Statistical Analysis

All the results will be calculated using SPSS version 26. Overall results for the outcome variables will be listed in tables for both descriptive (Mean, mean percentage, Standard deviation), & inferential statistics (Paired t - test will be used to find the significance difference between two groups (before & after), association results will be analysed using chi square analysis)

Expected Results

Structured teaching program will be effective in improving knowledge regarding first aid management of foreign body aspiration among parents of under five children. There will be positive or negative correlation between knowledge regarding first aid management of foreign body aspiration and demographic variables.

DISCUSSION

Present study findings will be supported by the results of study conducted by Sree Vidhya K. P. et. al. (2021) that there was a highly statistically difference in parents knowledge between pre-post and after teaching programme.⁶ The conclusion of this study will be reinforced by another study by Kumudhavalli D. Karthi R. (2021) at selected rural area of Villupuram, Tamilnadu, where improvement in parents' knowledge was observed. It will help parents for early identification of foreign

body aspiration among under five children.⁷

CONCLUSION

Investigators expect parents, who will intervene with structured teaching programme regarding first aid management of foreign body aspiration will be empowered with knowledge. Structured teaching programme will improve parents knowledge regarding first aid management of foreign body aspiration and enable them to develop positive attitude leads to acquiring competencies to handle the children with foreign body aspiration.

Consent And Ethical Approval

Approval will be obtained from Institutional Ethical Committee. Written consent will be taken from the subjects for participation in the study. Parents will be instructed that their participation in this study is entirely voluntary and they may opt out at any moment. Prior permission will be taken from relevant stakeholders to conduct the study. Throughout the Study, confidentiality will be maintained. The study's findings will be disseminated to participants and published in a peer reviewed journal.

Conflict of Interest: Authors declare no conflicts of interest.

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