

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Nutritional Management of Child with COVID-19 among Nursing Students at Rohilkhand School of Nursing Bareilly, (U. P).

Anitha .P ¹, Harshita Harbola²

¹Professor of Child Health Nursing, Rohilkhand College of Nursing Bareilly, U. P, India

²M. Sc (N) Rohilkhand College of Nursing Bareilly, U. P, India

²Corresponding Author E- mail: [harshitaharbola08\[at\]gmail.com](mailto:harshitaharbola08[at]gmail.com)

Abstract: *Background of the study:* Rapid spread of the COVID-19 pandemic has become a major cause of concern for the health care professionals in all over the world all health care professional must be aware of latest information regarding COVID-19 outbreaks and management. The main objective of the study was to assess the knowledge regarding Nutritional management of child with COVID-19. *Material & Methods:* An evaluative approach with pre experimental one group pre test post test design was selected for the study and purposive sampling techniques was used to selected 40 GNM 2nd year students at Rohilkhand School of Nursing Bareilly, U. P. Structured knowledge questionnaire was used to assess the regarding Nutritional management of child with COVID-19. *Result:* The collected data were analysed the findings revealed that the mean post test knowledge score was [22.8] was higher than the mean pre test knowledge score [13.77]. There was significant difference between pre test and post test knowledge score and t value was 25.27. Chi square test revealed that there was significant association between the knowledge score and age. *Conclusion:* The finding of the study reveals that after the implementation of structured teaching programme the knowledge score level was improved regarding Nutritional Management of child with COVID-19. Hence the structured teaching programme was effective.

Keywords: Assess; knowledge; effectiveness; Nutritional management; COVID-19; child

1. Introduction

COVID-19, a disease caused by a novel corona virus, becomes a major global human threat that has emerged into a pandemic. The word “Corona” derived from Latin word which meaning “crown” or “halo”. Corona virus is one of the major pathogens that mainly affect the human respiratory system. A group of patients was admitted in hospitals with an initial diagnosis of pneumonia of an unknown etiology. Early reports estimated that the onset of a possible corona virus outbreak called severe acute respiratory syndrome corona virus 2 (SARS - CoV - 2,) causing the disease COVID-19. The World Health Organization (WHO) declared the COVID19 outbreak as pandemic on 11 March 2020. ^[1]

Nutrition is defined as the science of food and its relationship with health. It is related to primarily with the parts played by the nutrients in body growth, development and maintenance. Adequate nutrition during early childhood is essentials to the development of each child’s potential. ^[2] The period from birth to till two years of age is “critical window” of opportunity for the promotion of optimal growth & development of the child, health and overall survival of children’s. ^[3]

COVID-19 become a global pandemic threatening the health and well being of the world, an estimated 47 million

children less than 5 year of age suffered from wasting, which puts them at higher risk of death. For children who survive, wasting adversely affects the body growth, development of brain and school performance of children’s. Wasted children are more prone to develop risk during this pandemic. First, they are at risk because of potential disturbance in the nutritional services and programmes that keep them alive. Secondly, under nutrition makes the children’s more susceptible to infection. And in the end, they are especially vulnerable because they rely on their parents to provide for them daily, to care for them, and to support them. If caregivers become ill, isolated or unable to access nutritious food and safe drinking water, children will suffer. Therefore, as the COVID-19 pandemic reaches to all over the world with a high burden of child under nutrition, including those affected by a humanitarian crisis, it is overcritical to include wasted children in the list of vulnerable groups to COVID19 ^[4]

2. Statement of the Problem

A study to assess the effectiveness of structured teaching programme on knowledge regarding Nutritional management of child with COVID-19 among Nursing students at Rohilkhand School of Nursing Bareilly, (U. P).

Objectives of the Study

- 1) To assess the effectiveness of STP regarding Nutritional management of child with COVID-19 among Nursing students.
- 2) To determine the association between the pre test knowledge score of Nursing students with their selected demographic variables.

Hypothesis of the study

H 1: There will be a significant difference between pretest and post test knowledge score of Nursing students regarding Nutritional management for child with COVID-19

H2: There will be significant association between pre test knowledge score with their demographic variables.

3. Research Methodology

Research approach: Quantitative research design

Research design: Pre experimental one group pre test - post test design

Population: Nursing students

Sample: G. N. M 2nd year

Sample size: 40

Sampling techniques: Non probability purposive sampling

Data collection tool: Structured knowledge questionnaire

Data collection procedure: Before going to data collection written permission letter was obtained from the authorities concerned. The purpose of this study was explained to the Nursing students and informed consent was obtained from the students. A pre test with structured knowledge questionnaire was administered, followed by administration of structured teaching programme regarding Nutritional management of child with COVID-19 to the samples. Post test was conducted after 7 days of the administration of structured teaching programme regarding Nutritional management of child with COVID-19. The data collection process was terminated by thanking the respondents for their patience and co - operation.

The data obtained was analyzed using descriptive and inferential statistics such as paired 't' test to compare the mean pre test and post test over all knowledge of Nursing students. Chi – square was used to find the association between pre test knowledge score with demographic variables.

4. Results

Table 1: Percentage and frequency distribution of socio – demographic characteristics, N=40

| S. No | Variables | Category | Frequency (f) | Percentage (%) |
|-------|---------------------------|------------------|---------------|----------------|
| 1. | Age | 18 – 20 | 24 | 60 % |
| | | 20 – 22 | 6 | 15 % |
| | | 22 - 24 | 5 | 12.5 % |
| | | 24 - 26 | 5 | 12.5 % |
| 2. | Gender | Male | 5 | 12.5 % |
| | | Female | 35 | 87.5% |
| 3. | Educational Qualification | 12 th | 26 | 65 % |
| | | Diploma | 5 | 12.5 % |
| | | Graduate & above | 9 | 22.5 % |
| 4. | Place of living | Urban | 23 | 57.5 % |

| | | Rural | 17 | 42.5% |
|----|---|-------|----|--------|
| 5. | Attend any e learning course regarding COVID-19 | Yes | 25 | 62.5 % |
| | | No | 15 | 37.5 % |

Table 2: Comparison of Pre Test and Post Test Level of Knowledge regarding Nutritional Management of Child with COVID-19, N=40

| Aspects | Overall Pre Test and Post Test Knowledge Score | | | Enhancement | DF | Paired T Test |
|-----------|--|---------------------|-------|-------------|----|---------------|
| | Mean | Mean percentage (%) | SD | | | |
| Pre test | 13.77 | 45.9% | 2.094 | 30.1% | 39 | 25.27* |
| Post test | 22.8 | 76 % | 3.073 | | | |

*Significant at 5% level, p value = 0.05, df =39, table value =2.023

Table 2: Illustrates that the mean post test knowledge score (22.8) was higher than the mean pre test knowledge score (13.77). Knowledge enhancement was 30.1% there was significant difference between pre test and post test score and t value was 2.023.

Hence, it was inferred that there was an increase in the level of knowledge after the structured teaching programme regarding Nutritional management of child with COVID-19. Hence the research hypothesis was accepted.

Chi square reveals that there was significant association between the pre test knowledge score with their selected demographic variables.

5. Discussion

Melisa Fermamdes et. al. conducted a study to assess knowledge regarding COVID-19 among Nursing students were majority of students belong to the age group of 17 - 21 years (73.88%), 64.6% of students were females and were majority of students 76.4% of the respondents had undergone exposure to learning course regarding COVID-19. The result showed that the highest mean score (7.67) which is 65% of the total score (average) was obtained of preventive measures, and the lowest mean score (2.4) which is 47% of total score (poor) in the areas of basic information about COVID-19. It is indicating the poor knowledge of participant in pre test score. Overall score of pre test knowledge was 14.94. After administrating the teaching programme the level of knowledge improved & the post mean score was higher than pre mean score. Statistical tests showed that there was a significant association between knowledge and programme of study (3.92) at p<0.05 level. There was no significant association found between knowledge with age in year and gender. [5]

6. Conclusion

The finding of the study reveals that after the implementation of structured teaching programme the knowledge score level was improved regarding Nutritional Management of child with COVID-19. Hence the structured teaching programme was effective.

Conflict of Interest

The author has no conflict of interest regarding this investigation.

7. Acknowledgment

I would like to express my heartiest gratitude to my research guide **Ms. Anitha P. Professor** in Child Health Nursing, Rohilkhand College of Nursing Bareilly, for helping me to project a relevant outlook of research work, through constant guiding spirit and support.

References

- [1] Naja F, Hamadeh R. Nutrition amid the COVID - 19 pandemic: a multi - level framework for action. European journal of clinical nutrition.2020 Aug; 74 (8): 1117 - 21.
- [2] Joshi PC. Malnutrition in children: A serious public health issue in Nepal. Health Prospect: Journal of Public Health.2012; 11: 61 - 2.
- [3] Tessema M, Belachew T, Ersino G. Feeding patterns and stunting during early childhood in rural communities of Sidama, South Ethiopia. Pan Afr Med J.2013; 14: 75.
- [4] Owino VO, Murphy-Alford AJ, Kerac M, Bahwere P, Friis H, Berkley JA, Jackson AA. Measuring growth and medium-and longer-term outcomes in malnourished children. Maternal & child nutrition.2019 Jul; 15 (3): e12790.
- [5] Fernandez Melisa, R Jyoti. A study to assess knowledge regarding COVID - 19: Nursing students. Asian Journal of Nursing Education and Research.2021; 11 (1): 65 - 67. Available on: <https://ajner.com/abstractview.aspx>.