

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Prevention of Protein Energy Malnutrition among G. N. M. 2nd Year Student of Health and Hygiene Nursing Institute at Alwar

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Abstract: ***Aim:** A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Prevention Of Protein Energy Malnutrition Among G. N. M. 2nd Year Student Of Health And Hygiene Institute At To assess the pre intervention knowledge of GNM 2nd year student regarding P. E. M. **Objectives:** To assess the effectiveness of structured teaching programme on PEM. To compare the difference between the pretest score and post test score. To associate the post intervention knowledge regarding PEM with selected socio demographic variable. **Methodology:** An evaluatory approach with one group pre - test post - test design was used on 50 Students through convenient sampling. **Results:** The findings pre test showed that about 42 (84%) students had poor knowledge & after STP 43 (86%) have good knowledge The overall knowledge score mean percentage was 8.14% in pre test and post test mean percentage was 24.8%. It shows that the post test knowledge score mean percentage was greater than the pre test knowledge score. This indicates that the structured teaching programme was effective in improving knowledge regarding Prevention of PEM (Protein Energy Malnutrition) among GNM 2nd year students.*

Keywords: PEM: Protein Energy Malnutrition, STP Structured Teaching Programme, X² Chi - square, H Hypothesis, SD Standard deviation, P Probability, D f Degree of freedom, n Sample size, M Mean, S Significant, NS Not significant.

1. Introduction

Malnutrition is a global burden. More than 800 million people are undernourished. In the developing countries 150 million children are malnourished. In India the major contributing factors are poverty and low social - economic status with low levels of education, poor sanitation and limited access to health services and high levels of infectious diseases.

Protein Energy Malnutrition (PEM) has been identified as a major health and nutrition problem in India. It occurs particularly in children in the first year of life. It is characterized by low birth weight. India in the past few decades, has witness rapid progress in terms of industrialization and agricultural production. Yet malnutrition especially under nutrition continues to be a major problem of public health significance in the country. It is a major contributor to high rates of childhood mortality maternal mortality and morbidities in the community. Though poverty is a major underlying cause, scores of other factors such as socio - demographic, socio - economic socio - cultural and lifestyle practices contribute significantly to the problem of malnutrition.

Need of the Study

Malnutrition is a major health problem in India. The report says 170 million children mainly in the developed world, are now considered 22 million under the age of five, i. e. 30% of the children's are malnourished children belongs to Asia. 56% of the deaths in under five children in developing

countries and 47% of below 3 years of age are undernourished. More than "10 million of the world's children die each year before reaching the age of five". Sadly to say two of every three of these children die from easily preventable, treatable diseases such as diarrhoea, pneumonia, malaria, measles and tetanus and from the conditions like malnutrition. "Ten children die every minute as a result of malnutrition".

Malnutrition is associated with abnormalities in the specific immune response and with susceptibility to infection. From early childhood it is associated with significant functionally increased impairment in adult life, reduced work capacity and decreasing economic productivity. Children who are malnourished not only tend to have increased morbidity and mortality but are also more prone to suffer from delayed mental development, poor school performance and reduced intellectual achievement.

Malnutrition covers a broad spectrum of illnesses including Protein - Energy Malnutrition and over nutrition and it kills, maims, retards, cripples, blinds and impairs human development on a truly massive scale worldwide. No population escapes malnutrition grasp despite of significant improvement in world food supplies. All countries have significant population groups with some forms of debilitating malnutrition.

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2. Methodology

Statement of the problem:

“A pre - experimental study to evaluate the effectiveness of structured teaching program on knowledge regarding prevention of PEM (protein energy malnutrition) among G. N. M.2ND year student of health and hygiene nursing institute at Alwar.

Objective of the Study:

- 1) To assess the pre intervention knowledge of GNM 2nd year student regarding P. E. M.
- 2) To assess the effectiveness of structured teaching programme on PEM in term of gaining knowledge among g. n. m.2nd year student.
- 3) To compare the difference between the pre test score and post test score.
- 4) To associate the post intervention knowledge regarding PEM with selected socio demographic variable.

Hypotehsis:

H1 - There is a significant difference between pre and post - test knowledge score among the G. N. M 2nd year student regarding prevention of P. E. M.

H2 - There is a significant association between post - test knowledge score of G. N. M 2nd year student with their selected socio - demographic variable.

Setting of the Study:

The study was conducted in the Health and Hygiene Nursing Institute at Alwar.

Population of the Study:

A sample size of the present study is 50 consisted of GNM 2nd year students studying in Health and Hygiene Nursing Institute at Alwar. Convenient sampling technique was used to select the samples of this study.

Tools for Data Collection:

The Structured knowledge questionnaire was used to evaluate the knowledge of regarding prevention of PEM among GNM 2nd year students of Health and Hygiene Nursing Institute at Alwar.

Description of the tool:

Section - A: deals with demographic data consist of 8 Items used to collect the sample characteristics, which comprises

of age, gender, religion, resident, type of family, socio economic status, family member in health care system, previous knowledge related to prevention of PEM.

Section - B: consists of 30 items, which has the knowledge questions about the knowledge of prevention of PEM using multiple choice questions.

There were 30 statements covering knowledge questions items with 4 options out of which one is the correct response. For every correct response a score of “one” and for every wrong response a “zero” was awarded. There were 30 knowledge questions with a maximum score is 30 and minimum score is zero.

Reliability of the Tool

The reliability was found to be 0.89. It was statistically significant and thus highly reliable.

Pilot Study:

The pilot study is a small preliminary investigation of the same general character as the major study. The main aim is to assess the feasibility, practicability and assessment of measurement.

3. Result

Below Table shows Frequency and Percentage Distribution of Respondents on Pre Test & Post Test Knowledge Score on Protein Energy Malnutrition: -

Knowledge Score	Classification of Respondents			
	Pre Test		Post Test	
	Number	Percentage	Number	Percentage
Poor (0 - 10)	42	84%	2	4%
Average (11 - 20)	6	12%	5	10%
Good (21 - 30)	2	4%	43	86%
Total	50	100%	50	100%

Table reveal that pre test result shows 42 (84%) students had poor knowledge, 6 (12%) had average knowledge and 2 (4%) had good knowledge. Whereas, in the post test result shows 4 (4%) students had poor knowledge, 5 (10%) had average knowledge and 43 (86%) had good knowledge regarding protein energy malnutrition.

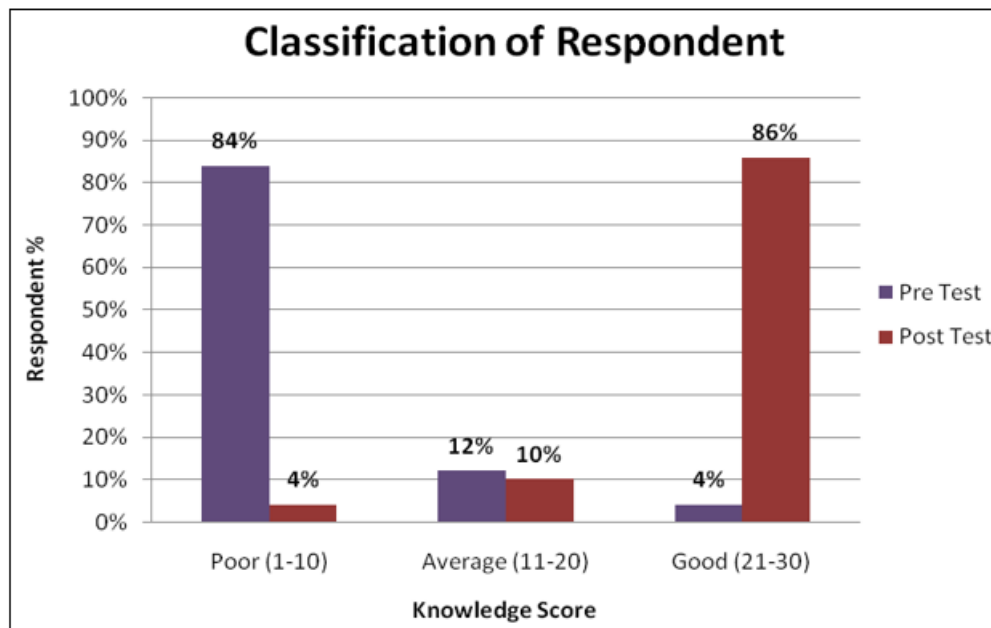


Figure: Bar Diagram Showing Frequency and Percentage Distribution of Respondents on Pre Test & Post Test Knowledge score on Protein Energy Malnutrition

4. Discussion

Section - A: Description of demographic characteristics of students:

Majority of students 21 were in the age group of 18 - 20 years, 29 were in the age group of >20 years. Most of students 41 were male and only 9 were female. Majority of student's family member 35 not related to were in the medical field and 15 students family member were in medical field. Majority of students 6 have previous knowledge about protein energy malnutrition prevention based management and 44 have not. Majority of students 35 live in nuclear family and 15 live in joint family. Majority of students 35 belongs to rural area and 15 belongs to urban area. Majority of students 40 from middle class and 10 from lower class. Majority of students 45 are Hindus and 5 are Muslims.

Section - B: Description the pre - test knowledge of student regarding protein energy malnutrition prevention Majority of [42 (84%)] of student had poor knowledge. 6 (12%) students had average knowledge. 2 (4%) students had good knowledge.

Section - C: Description of the post - test knowledge of student regarding protein energy malnutrition prevention. Majority of 43 (86%) of students had good knowledge. 5 (10%) students had average knowledge. 2 (4%) students had poor knowledge.

Section D: Distribution of respondents on pre test & post test knowledge level on protein energy malnutrition prevention. Pre test result shows 42 (84%) students had poor knowledge, 6 (12%) had average knowledge and 2 (4%) had good knowledge. Post test result shows 4 (4%) students had poor knowledge, 5 (10%) had average knowledge and 43 (86%) had good knowledge regarding protein energy malnutrition.

Section - E: Determine the effectiveness of planed teaching program on knowledge of protein energy malnutrition prevention. Mean value of pre - test is 8.4 and standard deviation is (SD +_3.96). The mean value of post - test is 24.08 and standard deviation is (SD +_4.62). Post - test mean score was higher than the pre - test mean scores; the "t" value is 14.98.

Section - F: Description of knowledge score with respected to the selected demographic variables of students. There was no association found between knowledge score and selected demographical variables.

5. Conclusions

- 1) Majority of student have poor knowledge score in pretest protein energy malnutrition prevention.
- 2) After the intervention majority students have good knowledge.
- 3) There is the teaching plan was effective.
- 4) There is no association between post test knowledge and students socio demographical variables.

Implication: The results of this study have scope on nursing practice, nursing education and nursing research.

6. Summary

This chapter deal with the summary of study, major finding conclusion, limitation nursing education nursing administration and nursing research have been stated, followed by its major findings and conclusion this chapter and with suggestion and recommendation for further research in field of prevention of protein energy malnutrition.

The present study was undertaken as an attempt to find out knowledge of nursing students regarding prevention of protein energy malnutrition and to find out the relationship

with demographic variables at GNM 2nd year students of health and hygiene institute at Alwar.

The pilot and main study conducted in the month of February 2024. The review of literature enables the investigator to develop the methodology and conceptual framework for the study and plan for data analysis. The conceptual framework adopted was based on general system theory. Sample consist of 50 students and data collection procedure was structured questionnaire. The analysis of the data was done using descriptive statistics like number, percentage, mean standard deviation, percentage mean and inferential statistics method such as 't' test.

The significant findings of the study are as follows: -

- 84 % of the selected subjects were having poor knowledge, 12% were having average knowledge & 4% have good knowledge regarding Prevention of PEM in pre - test.
- 4% of the selected subjects were having poor knowledge, 10% were having average knowledge & 86% have good knowledge regarding Prevention of PEM in post - test.
- The 't' value was found to be 14.98

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