

Effectiveness of Structured Teaching Programme on Knowledge Regarding Role of Diet in SARS-COVID-19 Infection among 3rd Year Basic Science Nursing Students in Selected Colleges at Bengaluru

Mohan Kumar S P

Lecturer, Department of Medical Surgical Nursing, Sri Kalabyraveshwara Swamy College of Nursing, Bangalore, Karnataka, India

Abstract: ***Background:** Nutrition plays a critical role in enhancing immunity during SARS-COVID-19 infection. This study aimed to evaluate the effectiveness of a structured teaching programme (STP) on knowledge regarding the role of diet in SARS-COVID-19 among 3rd year basic science nursing students. **Methods:** An evaluative research approach with a one-group pre-test post-test design was adopted. A total of 60 students were selected using convenient sampling. Data was collected using a structured knowledge questionnaire. The STP was administered, and post-test was conducted after 7 days. **Results:** Pre-test findings revealed that 38.3% had inadequate knowledge and 61.7% had moderately adequate knowledge. After the STP, 90% of the participants demonstrated adequate knowledge. The mean pre-test score was 15.43, and the post-test mean score increased to 26.26. The calculated t-value (-19.21, $p < 0.0001$) indicated a significant improvement. **Conclusion:** The structured teaching programme was effective in improving knowledge regarding the role of diet in SARS-COVID-19 infection among nursing students.*

Keywords: Structured teaching programme, Diet, Knowledge, SARS-COVID-19, Nursing students

1. Introduction

SARS-COVID-19, caused by SARS-CoV-2, posed a global health crisis with widespread morbidity and mortality. Optimal nutrition has been recognized as a key factor in boosting immunity and reducing infection risk. Nursing students, as future health professionals, require adequate knowledge regarding the role of diet in prevention and management of SARS-COVID-19.

2. Objectives

- 1) To assess the existing knowledge regarding role of diet in SARS-COVID-19 infection among nursing students.
- 2) To evaluate the effectiveness of a structured teaching programme on knowledge.
- 3) To determine the association between pre-test knowledge and selected demographic variables.

3. Materials and Methods

- 1) Design: One-group pre-test post-test design.
- 2) Sample: 60 third-year basic science nursing students selected through convenient sampling.
- 3) Tool: Structured knowledge questionnaire with 30 items.
- 4) Intervention: Structured teaching programme on the role of diet in SARS-COVID-19 infection.
- 5) Data Collection: Pre-test followed by STP, and post-test conducted after 7 days.
- 6) Analysis: Descriptive and inferential statistics including paired t-test and chi-square test.

4. Results

Pre-test findings showed 38.3% of students had inadequate knowledge and 61.7% had moderately adequate knowledge.

None had adequate knowledge. Post-test results showed that 90% had adequate knowledge and 10% had moderately adequate knowledge. The mean pre-test score was 15.43, while the post-test mean score increased to 26.26. The paired t-test value was -19.21 ($p < 0.0001$), indicating a significant gain in knowledge.

5. Discussion

The study demonstrated a significant improvement in knowledge among nursing students after the structured teaching programme. Findings are consistent with similar studies that emphasized the role of nutrition education in improving knowledge and practices towards infectious disease prevention. Strengthening the knowledge of nursing students will enhance their role in patient care and public health.

6. Conclusion

The structured teaching programme was effective in improving knowledge regarding the role of diet in SARS-COVID-19 infection among 3rd year basic science nursing students. The study highlights the importance of incorporating nutrition education into nursing curriculum to prepare students for managing public health challenges.

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