

A Quasi-Experimental Study to Assess the Effectiveness of Structured-Teaching Programme on Knowledge Regarding Covid-19 among Adults Age Group (18-33) in a Selected Area of District Kangra, Himachal Pradesh

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Abstract: COVID-19 emerged as a major global public health challenge affecting physical, psychological, and social well-being. Adequate knowledge regarding preventive measures, vaccination, symptoms, and management is essential to reduce transmission and improve public health outcomes. Structured teaching programmes can play an important role in improving awareness and preventive practices among adults. **Objectives:** To evaluate the effectiveness of a structured teaching programme on knowledge regarding COVID-19. **Methods:** A quasi-experimental research design was adopted for the study. The study was conducted among 100 adults aged 18–33 years in a selected area of District Kangra, Himachal Pradesh. Participants were selected using a non-probability convenience sampling technique. A structured questionnaire was used to assess the knowledge regarding COVID-19. Pre-test knowledge assessment was conducted before administering the structured teaching programme. The intervention included PowerPoint presentations, flashcards, charts, pamphlets, and questionnaires related to causes, symptoms, prevention, vaccination, diagnosis, and management of COVID-19. A post-test was conducted after the intervention to evaluate effectiveness. Data were analysed using descriptive and inferential statistics. **Results:** The findings of the study revealed that the structured teaching programme significantly improved the knowledge of adults regarding COVID-19. Post-test knowledge scores were higher compared to pre-test scores. A significant association was also found between post-test knowledge scores and selected demographic variables. **Conclusion:** The study concluded that the structured teaching programme was effective in improving knowledge regarding COVID-19 among adults aged 18–33 years. Health education programmes should be encouraged at community level to enhance awareness and promote preventive practices related to infectious diseases.

Keywords: COVID-19, Structured Teaching Programme, Knowledge, Adults, Community Health Nursing, Quasi-Experimental Study

1. Introduction

COVID-19 is a highly infectious viral disease caused by the SARS-CoV-2 virus. The pandemic created unprecedented challenges for healthcare systems worldwide and highlighted the importance of public awareness regarding infection prevention and control. Public health measures such as hand hygiene, mask use, vaccination, social distancing, and self-isolation became essential preventive strategies.

Adults are an important population group because of their active social interaction and occupational exposure, which increase the risk of transmission. Therefore, improving knowledge regarding COVID-19 through structured educational interventions is necessary for effective prevention and control.

Structured teaching programmes are effective educational methods that provide organized and systematic information to participants. Such programmes help improve awareness, understanding, and adoption of healthy practices.

2. Need of the Study

The rapid spread of COVID-19 created a need for accurate information and preventive awareness among the public. Misconceptions, inadequate knowledge, and lack of awareness regarding preventive measures can increase the

risk of infection transmission. Community-based educational interventions are important to improve understanding and promote healthy behavior.

The present study was undertaken to assess the effectiveness of a structured teaching programme on knowledge regarding COVID-19 among adults aged 18–33 years in District Kangra, Himachal Pradesh.

3. Methodology

- **Approach & Design:** Quantitative research approach utilizing a quasi-experimental (one group pre-test post-test) design.
- **Sample Size & Technique:** 100 adults aged 18–33 years selected via non-probability convenience sampling.
- **Setting:** Selected areas of District Kangra, Himachal Pradesh (Main study conducted at Gaganth and Kotla).
- **Data Collection Tool:** A 30-item self-structured knowledge questionnaire.
- **Intervention:** A Structured Teaching Programme (STP) using a PowerPoint presentation, flashcards, charts, and pamphlets covering COVID-19 transmission, incubation, treatment, and prevention.
- **Timeline:** Pre-test administered on Day 1, intervention given on Day 3, and the post-test evaluated on Day 15.

4. Results

4.1. Demographic Profile (N=100)

- Age: Tied majority at 22–25 years (36%) and 26–29 years (36%); 18–21 years (24%); 30–33 years (4%).
- Gender: Male (51%), Female (49%).
- Religion: Hindu (70%), Sikh (18%), Muslim (12%).
- Occupation: Private sector (41%), College students (33%), Government sector (22%), School students (4%).
- Marital Status: Unmarried (89%), Married (11%).
- Primary Information Source: Media (10%), Health Worker (6%), Paper (5%).

4.2 Knowledge Level Improvement

The study demonstrated a massive, statistically significant shift in knowledge quality following the teaching intervention:

Knowledge Level (Score Range)	Pre-Test Percentage	Post-Test Percentage
Inadequate Knowledge (0–10)	65%	0%
Moderate Knowledge (11–20)	34%	30%
Adequate Knowledge (21–30)	1%	70%

4.3. Statistical Analysis & Effectiveness:

- Pre-Test Metrics: Mean score of 11.16 (± 4.228 SD), range 4–21, mean percentage of 37.20%.
- Post-Test Metrics: Mean score of 21.85 (± 2.618 SD), range 16–28, mean percentage of 72.80%.
- Significance: The calculated paired t -test value was 26.174, which vastly exceeded the critical table value ($t = 1.98$) at a 0.05 level of significance ($p < 0.001$). This statistically proved that the Structured Teaching Programme was highly effective.
- Demographic Associations: Both age ($p = 0.042$) and occupation ($p = 0.043$) showed a statistically significant association with post-test knowledge scores. No significant associations were found for gender, religion, marital status, or source of information.

5. Discussion

The findings of the present study support the importance of educational interventions in improving public awareness regarding COVID-19. Structured teaching programmes help individuals understand disease prevention, vaccination benefits, and healthy practices.

The results are consistent with previous studies conducted among adults, nursing students, healthcare workers, and the general population, which reported significant improvement in knowledge and preventive practices after educational interventions.

6. Conclusion

The structured teaching programme was effective in improving knowledge regarding COVID-19 among adults aged 18–33 years. Community-based health education

programmes are essential for improving awareness and preventing infectious diseases.

7. Recommendations

- 1) Similar studies can be conducted on a larger sample.
- 2) Comparative studies may be conducted in rural and urban areas.
- 3) Educational interventions may be extended to adolescents and elderly populations.
- 4) Follow-up studies can be conducted to assess long-term retention of knowledge.

References

- [1] World Health Organization. Coronavirus Disease (COVID-19) Pandemic.
- [2] Ministry of Health and Family Welfare, Government of India.
- [3] COVID-19 Vaccination Operational Guidelines.
- [4] Community Health Nursing Research Textbooks.
- [5] Relevant national and international journal articles related to COVID-19 awareness and educational interventions.