



A study to assess the effectiveness of planned teaching module on practice regarding hand hygiene status among students of secondary school at selected urban area of Kokapet, Ranga Ready District Andhra Pradesh

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Abstract

Introduction: It is well-documented that the most important measure for preventing the spread of pathogens is effective hand washing. Germs are found everywhere. Germs are so small that cannot be seen. Germs can make person sick. They can get rid of germs by washing their hands. Generally the person touches 15 objects in one minute. So easily they can get the infection which increases the mortality and morbidity thereby the cost of health care.

Objective: The main aim of the study is to assess the effectiveness of planned teaching module on practice regarding hand hygiene status among students of secondary school at selected urban area of Kokapet, Ranga Ready District Andhra Pradesh.

Research Methodology: A pre experimental one group pre-test post-test design study conducted on 60 students of secondary school. The sample selected through convenient sampling technique. The dependent variable includes practice of students and independent variables include planned teaching module regarding hand hygiene. The data collected through checklist.

Results: The mean practice score of the participants regarding hand hygiene was 13.20 ± 1.48 before administration of the planned teaching module while 16.12 ± 2.71 after administration of the planned teaching module. The t value was 7.30. It was found to be statistically significant at $p < 0.001$.

Conclusion: The study finding proved that the planned teaching module administered by the researcher was effective to improve the practice of the secondary school children on hand hygiene.

Keywords: Effectiveness, planned teaching module, practice, hand hygiene, students

Introduction

It is well-documented that the most important measure for preventing the spread of pathogens is effective hand washing. Germs are found everywhere. Germs are so small that cannot be seen. Germs can make person sick. They can get rid of germs by washing their hands. Generally the person touches 15 objects in one minute. So easily they can get the infection which increases the mortality and morbidity thereby the cost of health care.

Children become infected with respiratory illnesses such as influenza or the common cold, diarrhoea. For example, if they do not wash their hands before touching their eyes, nose, or mouth. Indeed, the Centre for Disease Control and Prevention (CDC) 2014 has stated: "one of the most important measures for preventing the spread of pathogens is effective hand washing." It protects best against diseases transmitted through fecal-oral routes (such as many forms of gastroenteritis) and direct physical contact such as impetigo, which may increase the child mortality and morbidity.

When the practice of hand washing is inculcated in their mind they adhere it strictly and develops it as their own behaviour. Children need to understand why it is important

to wash their hands. To do this they need help from their parents, caregivers, and teachers or from a member of staff at their schools. Children love to play with mud and sand, which host a lot of germs which can cause illness.

Teaching them the significance of proper hand washing is a very crucial step towards living a healthy life. Encouraging children from an early age to wash their hands will help to ensure that this practice becomes a lifelong habit. The transmission of common communicable infections such as colds and flu can be prevented by following good hand hygiene. Teaching proper techniques of hand washing to children will not only help to influence their hand washing practices at home but also at school. Many illnesses start with poor hand washing. Salmonella, campylobacter, MRSA, flu, diarrhoea and sickness, the common cold, impetigo these are just some of the viruses and infections.

Need of the study

Researchers have measured substantial changes in hand-washing behavior among children after a preschool-based hand-washing promotion programme. Moreover, school children can be important behavior change agents in the

community and schools and with the help of other students introduce and maintain changes in the school environment. In the household settings, they communicate health messages and introduce relevant health practices to help their parents/siblings improve their knowledge and change their behavior through participation.

Effective hand washing technique which doesn't take much time or effort is supposed to decrease transmission of infection. Hand washing is like a "do-it yourself" vaccine-it involves five simple and effective steps (Wet, Lather, Scrub, Rinse, Dry). Adopting this simple habit can play a major role in protecting your health. The first historical evidence on the importance of hand washing was revealed in a maternity clinic in Vienna in 1847 where Cleaning hands by medical personnel reduced maternal mortality.

School children's hygiene literacy and practices have therefore received considerable attention to control the spread of infections among this group. Infections due to poor knowledge and unhygienic habits of young children lead to compromised academic performance. Knowledge, Attitude, and Practice (KAP) survey of primary school students in Ethiopia indicated that almost half of the students had adequate knowledge of hygiene. However, the practice of hand washing with soap was not appreciable (36%).

Hand washing is significantly important in children as children are vulnerable to illness since they are very playful and more exposed to dirt, soil and other source of disease causing infections. By teaching them proper hand washing techniques, school-aged children can keep their own hands clean and also teach other children how to stop the spread of germs.

Aim of the study

The main aim of the study is to assess the effectiveness of planned teaching module on practice regarding hand hygiene status among students of secondary school at selected urban area of Kokapet, Ranga Ready District Andhra Pradesh.

Objectives of the study

- To assess the practices regarding hand hygiene among students of secondary school.
- To evaluate the effectiveness of planned teaching module on practices regarding hand hygiene among students of secondary school.
- To find association of practices regarding hand hygiene among students of secondary school with their selected demographic variables.

Hypotheses

H₁: There is a significant difference in practice regarding hand washing after administration of planned teaching module among students of secondary school at the level $p < 0.05$.

H₂: There is a significant association of selected socio demographic variables and health related variables with level of practice regarding hand washing among students of secondary school at the level $p < 0.05$.

Review of Literature

Review of literature is presented under the following

heading.

1. Review of literature related to practice of hand hygiene among secondary school children.
2. Review of literature related to educational interventions among school children regarding hand washing.

Research Methodology

Research Approach: Quantitative research approach was used.

Research Design: The research design adopted for the present study was a pre-experimental one group pre and post-test design was chosen

Independent Variable: In present study planned teaching module regarding hand hygiene was independent variables.

Dependent Variable: In the present study level of practice regarding hand hygiene technique among IX and X standard school children.

Demographic Variables: Demographic variables selected for this study are age, gender, religion, occupation of parents, type of family, family income and previous knowledge.

Setting of the study: The present study was conducted at Kokapet, Ranga Ready District Andhra Pradesh.

Sample Size: The investigator selected IX and X standard school students.

Sampling Technique: The sampling technique used for this study was convenient sampling technique.

Population: The target population for the study was school children who were studying IX and X standard.

Inclusion criteria

- All the school children who were studying IX and X standard and residing at urban area of Kokapet, Ranga Ready District Andhra Pradesh.
- Children who were aged between 14 to 16 years.
- Children who were able to speak, read and write Hindi and English.

Exclusion criteria

- Children who were not willing to participate in this study.
- School children who were are medically unfit.

Data Collection Tools and Technique: The instrument select in a research should as far as possible be the vehicle that would best obtaining data for drawing conclusions pertinent to the study and add to the body of knowledge in discipline.

Tool: The self-administered checklist was used to assess the practices of students. The final tool consist of:

- **Part I:** Socio demographic variables
- **Part II:** Observation checklist to assess the practice on hand hygiene

Reliability: The reliability was calculated by using split half method. Inter rated score was 0.79 and found to be reliable

Data Collection Procedure: A written formal permission was obtained from principal of senior secondary school of Kokapet, Ranga Ready District Andhra Pradesh to conduct

the study from 15/09/2019 to 08/10/2019. The samples were informed by researcher about the nature and purpose of study. The investigator himself assess the effectiveness planned teaching module on hand hygiene.

Results

Table 1: Baseline mean practice score of the secondary school children regarding hand hygiene before administration of the planned teaching module

Variable	Mean	SD	Minimum Score	Maximum Score
Total practice score	13.20	1.48	6	15

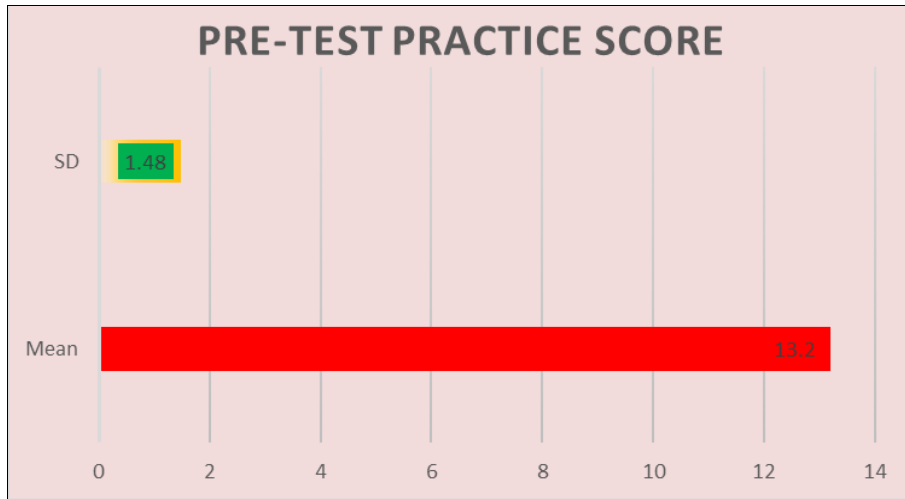


Fig 1: Bar diagram showing Mean Practice score of participants regarding hand hygiene before administration of planned teaching module

Table 1 and figure 1 depicts the baseline mean practice score of the secondary school children regarding hand hygiene. The mean practice score of the participants before administration of the planned teaching module regarding

hand hygiene was 13.20±1.48. The minimum score of participants was 6 and maximum score of the participant was 15.

Table 2: Mean practices score of the secondary school children regarding hand hygiene after administration of the planned teaching module

Variable	Mean	SD	Minimum Score	Maximum Score
Total practice score	16.12	2.71	10	19

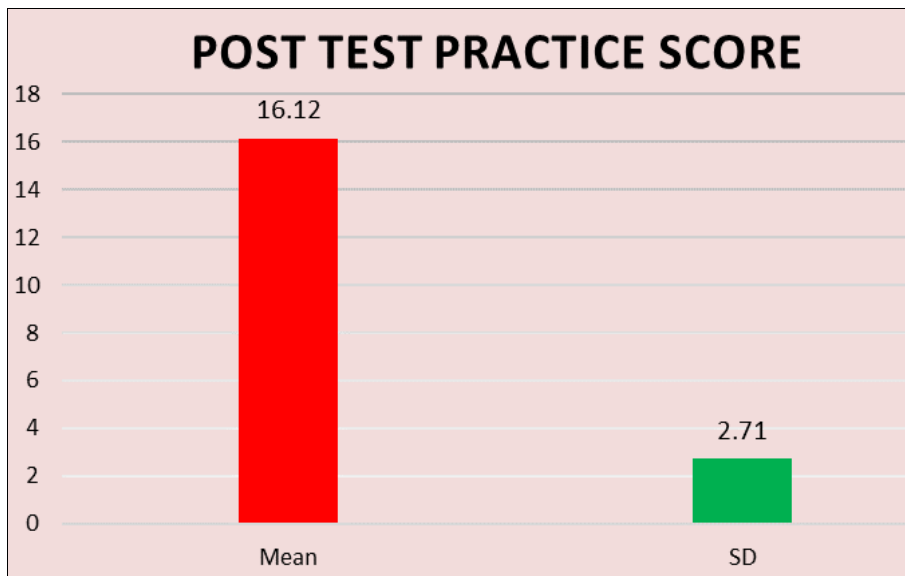


Fig 2: Bar diagram showing Mean Practice score of participants regarding hand hygiene after administration of planned teaching module

Table 2 and figure 2 depicts the mean practice score of the secondary school children regarding hand hygiene after administration of the planned teaching module regarding hand hygiene. The mean knowledge score of the participants

after administration of the planned teaching module regarding hand hygiene was 16.12 ± 2.71 . The minimum score of participants was 10 and maximum score of the participant was 19.

Table 3: Mean difference of practice score regarding hand hygiene among secondary school children after administration of the planned teaching module N=60

Variable	Mean Difference	SD	Paired t test	p value
Posttest-pretest	2.91	1.03	7.30	<0.001**

*Significant at $p < 0.05$; **significant at $p < 0.01$

Table 3 depicts mean difference of practices score regarding hand hygiene among secondary school children after administration of the planned teaching module. It interprets the effectiveness of the planned teaching module on practices regarding hand hygiene. There was statistical significant difference between pre-test and post-test practice score which is calculated by paired t test. The t value was 7.30. It was found to be statistically significant at $p < 0.001$.

Conclusion

The study finding proved that the planned teaching module administered by the researcher was effective to the improve the practices of the secondary school children on hand hygiene.

Conflict of Interest: The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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