

# Effectiveness of Planned Teaching Program on Knowledge on Management of Feco-Oral (5F's – Food, Fingers, Fields, Feces, Flies) Disease Transmission

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## Abstract

**Background:** Faecal-orally transmitted parasites are those parasites which are spread through faecal contamination of food and drinks. Infections with these parasites are among the most common in the world being responsible for considerable morbidity and mortality, especially in children. This study was carried out to determine the impact of planned teaching health education on the management of faecal-orally transmitted parasitic infections among Anganwadi workers & helpers at rural Kolar Taluk. The diseases that spread from one person to another person in any mode is called a communicable disease, aerial viruses, and bites from. Common infectious diseases include common colds, diarrhoea, malaria, flu, mumps, and scarlet fever. The main route of infectious disease is transmission of feco oral route. A feco-oral route can be defined as a transmission of disease in a particular route in which the living microorganisms in those particles spread from one to another.

**Martial & method:** A one group pre-test post-design evaluative strategy was used. In Kolar Taluk, 68 Anganwadi workers were nominated from various anganawadi centres using a convenient sampling technique. Data was collected between 6/4/22 to 05.05.22 by using structured knowledge questionnaire.

**Result:** Reveal that the overall pre-test knowledge scores of study participants reveals that majority 44(64.7%) of them having inadequate knowledge on management of feco –oral diseases transmission, and 24(35.29%) of study participants having moderately adequate knowledge.

**Conclusion:** The study's final finding was that the proposed training programme significantly improved the knowledge of anganawadi workers regarding supervision of feco oral disease transmission.

**Key words:** Anganwadi worker, 5F's diseases, communicable disease, Feco-oral route, and Infectious diseases)

**How to cite this article:** Dr. Malathi K V, Ms Jayashreerajua.R, Ms Jaimy Martin, Ms Kavitha R, Ms Christeena EB, Effectiveness of Planned Teaching Program on Knowledge on Management of Feco-Oral (5F's – Food, Fingers, Fields, Feces, Flies) Disease Transmission, Int J Drug Deliv Technol. 2026;16(52s): 965-967. DOI: 10.25258/ijddt.16.52s.122

**Source of support:** Nil., **Conflict of interest:** None

## Introduction

Children are the foundation of a strong and healthy nation. Children constitute more than 1.2 billion worldwide, and about 21% of Indian population. Morbidity and mortality occurring in this age group is mostly due to preventable causes. Young and growing children have poor knowledge and lack of awareness about communicable disease transmission and the ill health affecting them<sup>1</sup>.

A disease is caused due to a specific organism or by its toxic products. It is transmitted from man, animal, or from environmental agents like food wastes, air, soil and dust, fluid, flies, feces and fomites which is called „communicable disease“. These infectious agents may transmit through 5 F's i.e., Food, Fingers, Fluids, Flies and Fomites. The main illnesses caused by 5F are Diarrhoea, typhoid fever, cholera and polio<sup>1</sup>. In India, the total number of diarrhoea deaths in a 6-year-old child is estimated to be 158.29 Yearly, with a rate of 9.1%<sup>2</sup>.

According to research studies, the high prevalence of oral transmission of 5F's illness is caused by poor hygiene. In addition to contaminated food and beverages. According to the ICDS, prevention and

management of 5F's diseases includes safe drinking water, improved hygiene, hand washing with soap, vaccination and health education<sup>3</sup>.

The Anganwadi worker (AWW) is the community based voluntary frontline worker of the ICDS program where she assumes a pivotal role due to her close and continuous contact with the beneficiaries<sup>4</sup>. Anganwadi worker (AWW) has to conduct various different types of job responsibilities, which include nutrition safe sanitation and health education. supplementary nutrition, growth monitoring, arranging immunization camps, health checkup camps and first aid, referral services to severely malnourished, sick and at risk children<sup>5</sup>.

**Material and methodology:** A quasi experimental with one group pre and post test design was adopted for the study. The ethical clearance was obtained from SDUCON ethical committee (ref no: SDUCON/IEC/72/2021-22) Based on the objectives of the study a structured knowledge questionnaire and lesson plan content on management of Feco-oral disease transmission was prepared in English then it was translated to Kannada. The tool and lesson plan content

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was sent to research and subject experts for its content validity. The setting of the study was selected anganwadi centres under Devarayasamudhra PHC Kolar district. After obtaining permission from medical officer the researchers approached selected anganwadi workers and helpers then explained them about statement of problem and objectives of the study. Then using convenient sampling technique-68 anganwadi workers were selected who met inclusion criteria. After the pre test, planned teaching programme on management feco-oral diseases transmission was conducted on the same day by using charts, LCD and black board for about 45 min. After 15 days of teaching programme a post test was conducted using same tool. The data was collected from 06/4/22 to 5/5/22. Then the collected data was analysis by using Descriptive statistics & inferential statistics.

### Results:

Based on the objectives of the study findings are presented as follows;

### I: Distribution of the anganwadi workers based on their socio demographic characteristics

#### Table -01

The socio-demographic data of **anganwadi workers** revealed that Majority(35.29%) of them were in the age group of 36-45 years, most (73.52%) of them had less than 10 years of working experience and whereas with regard to qualification majority (51.47%) completed their PUC.

### II: Pre assessment of knowledge on management of feco-oral disease transmission.

#### Table-02

The overall pre test knowledge scores of study participants reveals that majority 44(64.7%) of them having inadequate knowledge on management of feco – oral diseases transmission, and 24(35.29%) of study participants having moderately adequate knowledge. Whereas the overall post test knowledge scores reveals that, 62(91.18%) having adequate level of knowledge on management of feco –oral diseases transmission and only 06(8.82%) had inadequate knowledge.

The aspect wise pre test mean knowledge scores regarding **General knowledge on communicable diseases** is 10.52 with SD 3.30 and knowledge scores on **prevention and complications of Communicable** pre-test mean score is 2.66 with SD 1.18, whereas the overall mean pre test knowledge score is 13.35 with SD 3.56.

### EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING MANAGEMENT OF FECO-ORAL DISEASES TRANSMISSION.

The overall pre-test mean knowledge scores was 13.35 with SD 3.56. and the post-test mean knowledge scores was 25.04 with SD 2.05. The obtained paired “t” test value was 22.55 which shows statistical significance at  $p < 0.05\%$ .

The aspect wise pre-test mean knowledge scores

regarding **General knowledge on communicable diseases** is 10.52 with SD 3.30 whereas post-test mean knowledge scores is 19.57 with SD 2.47. the obtained paired “t” test value was 16.0 with SD 0.00 and with regard to knowledge on **prevention and complications of Communicable diseases**, the pre-test mean score is 2.66 with SD 1.18, whereas post test mean knowledge scores is 4.99 with SD 0.93. the obtained paired “t” test value was 13.40. which shows statistical significance at  $p < 0.05\%$ .

### ASSOCIATION BETWEEN KNOWLEDGE SCORES WITH SELECTED SOCIAL DEMOGRAPHIC VARIABLES

The calculated chi-square value for age is (0.09), for experience it is (0.39) and for qualification it is (2.11) which was less than table value of 3.84 indicating no significant association between knowledge score with socio demographic variables age, Experience and qualification hence accepting the null hypothesis .

**Discussion:** Results of the study findings was discussed based on the objectives

**Objective 1:-**To assess the level of knowledge on management of feco oral disease transmission among anganwadi workers at community area.

The overall pre-test knowledge scores reveals that, majority 44(64.7) of participants had inadequate knowledge 24(35.29) had moderately adequate level of knowledge and none of them had adequate knowledge average (15-22) .whereas in post-test majority 62(91.18) of participants had adequate knowledge and only 6(8.82%) having inadequate knowledge.

The finding of the study was supported by M. Sreelatha, G.H. Sri Vani, P.Sudha Rani conducted a cross-sectional study on the effectiveness of a video-assisted learning program knowledge of the 5F's of disease transmission among children from selected schools, out of 60 samples, The findings revealed that in the preliminary test were inadequate for 35 (58.30%) of 60 children knowledge, 25 (41.70%) had intermediate knowledge and none of them had it adequate knowledge.

**Objective2:** To evaluate the effectiveness of planned teaching program on management of feco oral disease transmission among anganwadi workers in selected community area.

**Objective3:-**Association between Knowledge Scores With Selected Social Demographic Variables

The calculated chi-square value for age is (0.09), for experience it is (0.39) and for qualification it is (2.11) which was less than table value of 3.84 indicating no significant association between knowledge score with socio demographic variables age, Experience and qualification hence accepting the null hypothesis . Supporting studies was not found

### Nursing implications:

The obtained data concludes several implications for nursing administration, nurse practitioner , nurse educator and research nurse.

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### Administration of nursing

The output will help the nurse administrators to take adequate steps in formulating the policies that provide support at both institutional and community levels.

The nursing administration should encourage the government authorities/BEO/CEO to plan orientation training programme for Anganwadi workers, school teachers' parents and include the content on management of communicable diseases and safe sanitation, hygienic practices safe drinking water. so that they can control the morbidity and mortality among children. Which also helps to promote health of individual as well as community.

### Nurse educator

The outcome of results disclosed that “The “Planned teaching programm” was effective in refining the details of managing of problem r/t safe sanitation, hygienic practices safe drinking water. Implication for nurse educator could give great emphasis in motivating the education department, school teachers, and /anganwadi workers who work in community. Community health nurse/anganwadi workers should be harried to endow with “health education” and “safe and healthy environment” programs to society & r family.

### Acknowledgement

I have no words to express the gratitude towards, Dr. G Vijayalakshmi Principal, Sri Devaraj Urs College of Nursing, Tamaka, Kolar for her valuable suggestions, constant interactions, for boosting my spirits through all ups and downs and above all for being a catalyst in completion of the study. My heartfelt special consideration to my family members for their un conditional support at every stage of the study. I devote my sincere gratitude to all the Study Experts, study participants and anganawadi center teachers and medical officer for their constant and timely help which made me to successful accomplish this task.

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