

A study to assess the effectiveness of sanitary latrine practice awareness programme on knowledge and attitude among National Rural Employment Guarantee Act Employees (NREGA) at selected rural area in Chengalpattu district

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SYNOPSIS

Keeping the environment clean through Sanitary Latrine Practice is one of the most important steps one can take to avoid getting sick and spreading germs. This study was conducted to assess the effectiveness of sanitary latrine practice awareness programme on knowledge and attitude among national rural employment guarantee act employees at selected rural area in Chengalpattu district.

The objectives were, to identify the effectiveness of sanitary latrine practice awareness programme on knowledge and attitude among the national rural employment guarantee act employees, and to associate the demographic variables with the level of knowledge and attitude regarding sanitary latrine practice.

A quantitative research approach of pre experimental with one group pre and posttest design was chosen for this study. By using non-probability purposive sampling technique a total of 100 samples were included for the study. The structured teaching programme was given by investigator with the help of AV aids. Pre and post test was conducted by multiple choice questions. The data analysis was done by using descriptive and inferential statistics. The result revealed that there was a statistically significant difference between pre and post test knowledge and attitude scores regarding sanitary latrine practice awareness programme among the national rural employment guarantee act employees at level $p < 0.001$. This study implies that creating awareness among the employees to construct the individual household latrine and motivate them to use the latrine will prevent of fecal contamination.

Keywords: Knowledge, Attitude, Sanitary Latrine Practice awareness programme, National rural employment guarantee act employees.

STATEMENT OF THE PROBLEM

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INTRODUCTION

Cleanliness is one of the most important practices for a clean and healthy environment. It is essential for everyone to learn about cleanliness, hygiene, sanitation and causes of various diseases due to poor hygienic conditions.

Mr. Rahul Aswal (2017) Stated that Cleanliness refers to the habitual acts of keeping the dirt away, to maintain good health, following both personal and environmental hygiene practices. In simple words, it refers to the state of being clean.

“Sanitation refers to public health conditions related to clean drinking water and adequate treatment and disposal of human excreta and sewage. Preventing human contact with feces is part of sanitation and hand washing with soap”. Sanitation system aims to protect human health by providing clean environment that will stop the transmission of diseases.

According to **Sunita Narain (2016)** the **Director General of the Center of Science and Environment**, revealed that India’s dismal sanitation situation is the reason for the country’s extremely high rate of water borne diseases. It increases the mortality and morbidity of all the people irrespective of age and sex.

Behavioral modification is required for good healthy practices among people. It can be achieved through educational programmes which will bring changes in attitude and practice of the individual. It will ultimately reduce the health care expenditure of the country.

Andrés Hueso WaterAid’s Policy Analyst (2016) stated that main view is that better sanitation is not about building toilets but about people’s behavior. If someone doesn’t feel the need to change their sanitary practices, government will spend millions on building toilets that simply won’t be used and will soon fall into disrepair. Making the sanitation campaign behavior-focused is not a simple task; it need more and better trained human resources at local levels, citizens’ involvement, smart targets and good monitoring systems, as well as room for experimentation and learning

Lack of sanitation and unhygienic practices affect the health and economics of the individual, family, community and the nation. Proper Sanitation facility (for example, sanitary latrines) promotes health because they allow people to dispose of their waste appropriately. Throughout the developing world, many people do not have access to suitable sanitation facilities, resulting in improper waste disposal. Result in an unhealthy environment contaminated by human waste. Without proper sanitation facilities, waste from infected individuals can contaminate a community's land and water, increasing the risk of infection for other individuals. Proper waste disposal can slow the infection cycle of many disease-causing agents.

STATEMENT OF THE PROBLEM

A study to assess the effectiveness of sanitary latrine practice awareness programme on knowledge and attitude among National Rural Employment Guarantee Act Employees (NREGA) at selected rural area in Chengalpattu district

OBJECTIVES OF THE STUDY

- To identify the effectiveness of Sanitary Latrine Practice Awareness Programme on Knowledge and Attitude among National Rural Employment Guarantee Act Employees (NREGA) at selected rural area in Chengalpattu district.
- To associate the demographic variables with the level of knowledge and Attitude on Sanitary Latrine Practice among National Rural Employment Guarantee Act Employees (NREGA) at selected rural area in Chengalpattu district.

HYPOTHESES

H₁: There is a significant difference between pre and post-test level of knowledge on Sanitary Latrine Practice among National Rural Employment Guarantee Act Employees who are subjected to Sanitary Latrine Practice Awareness Programme.

H₂: There is a significant difference between pre and post-test level of attitude on Sanitary Latrine Practice among National Rural Employment Guarantee Act Employees who are subjected to Sanitary Latrine Practice Awareness Programme.

DELIMITATION

- Sample size was delimited to 100
- Study was delimited to the time period of 6 weeks.
- Study was confined to National Rural Employment Guarantee Act employees residing in village, Chengalpattu District

PROJECTED OUTCOMES

- This study will help to assess the knowledge level of the people about sanitary latrine practice
- The findings of this study will emphasize the improvement in attitude towards the usage of toilets.

- The outcome of this study would help the people to know about SwachhBharatMission.
- This study would help to understand the problems associated with OpenDefecation and Health improvement while using sanitary latrine.

REVIEW OF LITRATURE

This chapter deals with the literature related to the Sanitary Latrine Practice and Effectiveness of Sanitary Latrine Practice Awareness Programme on Knowledge and Attitude among National Rural Employment Guarantee Act Employees.

- PART I** - Literature related to the impact of open field defecation.
- PART II** - Literature related to knowledge and attitude of regarding the importance of sanitary latrine practice.
- PART III** - Literature related to the government schemes to motivate sanitary latrine practice

CONCEPTUAL FRAMEWORK

The investigator modified the health promotion model and adopted for this study

METHODOLOGY

Research Approach

A quantitative approach was used for this study.

Research Design

A Pre-experimental design, one group pre and post-test was used for this study to evaluate the effectiveness of Sanitary latrine practice awareness programme among National Rural Employment Guarantee Act Employees at chengalpattu district.

SCHEMATIC REPRESENTATION OF RESEARCH DESIGN

Group	Pre-test	Intervention	Post test
Study Group	O ₁	X	O ₂

Keys

- O₁ = Pre-test on assessment of knowledge and attitude regarding Sanitary Latrine Practice
- X =Sanitary Latrine Practice Awareness Programme

= Post-test on assessment of knowledge and attitude regarding Sanitary Latrine Practice.

VARIABLES

Dependent variable

It refers to the assessment of knowledge and attitude regarding Sanitary Latrine Practice among National Rural Employment Guarantee Act Employees residing in kallabiranpuran village, in Chengalpattu district.

Independent variable

In this study independent variable was sanitary latrine practice awareness programme.

Setting of the study

The study was conducted among the National Rural Employment Guarantee Act Employees at kallabiranpuran village, in Chengalpattu district. Total strength of the population was around 110 out of that 100 National Rural Employment Guarantee Act Employees were selected for this study by non-probability purposive sampling technique.

A working hour was from 9am to 4 pm with a lunch break of 1 hour from 1pm to 2pm.

POPULATION

Target population

It refers to all the people residing in rural areas.

Accessible population

The accessible population for this study was National Rural Employment Guarantee Act Employees, aged 20-60 years and residing at kallabiranpuran village, in Chengalpattu District.

Sample

National Rural Employment Guarantee Act Employees residing in kallabiranpuran village, and those who fulfilled the inclusive criteria.

Sample size

The sample selected for this study was 100 National Rural Employment Guarantee Act Employees residing in kallabiranpuran village at Chengalpattu District.

Sampling technique

A Non-probability purposive sampling technique was used for this study to recruit the samples.

SAMPLING CRITERIA

Inclusive criteria

- National Rural Employment Guarantee Act Employees of both male and female, and aged between 20 to 60 years.
- People those who were the permanent resident of kallabiranpuran village, Chengalpattu district.
- People those who were able to read Tamil.

Exclusive criteria

- People those who were using sanitary latrine
- People those who were not willing to participate in this study
- People those who were absent.

SELECTION AND DEVELOPMENT OF THE STUDY INSTRUMENTS

The investigator devised the structured instrument to assess the effectiveness of sanitary latrine practice awareness programme on knowledge, attitude among National Rural Employment Guarantee Act Employees, which composed of four parts.

Description of the tool

The tool consisted of 4 parts

Part I - Demographic variables.

Part II - Structured Questionnaire to assess the level of knowledge on sanitarylatrine Practice

Part III- Likert scale to assess the level of Attitude on Sanitary Latrine Practice.Part IV- Sanitary latrine practice awareness programme

PART I

It consisted of demographic variables which included age, sex, religion, and educational status, type of family, number of children, family income per month, defecation practice and source of previous information.

PART II

It encompassed self-administered structured multiple choice questions which included 20 items relevant to assess the level of knowledge on sanitary latrine practice.

PART III

It consisted of self-administered three point likert scale which included 10 items to assess the level of Attitude on sanitary latrine practice.

PART IV

It included the sanitary latrine practice awareness programme designed and taught by the investigator to assess impact on the knowledge and attitude regarding sanitary latrine practice among National Rural Employment Guarantee Act Employees. It was a video assisted teaching and Pamphlets were given as a reinforcement.

The components of teaching included meaning of sanitary latrine, benefits, impact of open field defecation and preventive measures taken by the government.

SCORE INTERPRETATION PART I

The numerical values were assigned for the demographic variables.

PART II

It consisted of 20 (twenty) structured multiple choice questions regarding the knowledge on sanitary latrine practice. The correct and wrong answer was given 1 (one) and 0 (zero) respectively. The total score was 20 (twenty).

The total scores were computed and categorized as follows

Table No: 2

Score	Percentage	Level of knowledge in percentage
0-10	<50%	Inadequate knowledge
11-15	51-75%	Moderately Adequate knowledge
16-20	>75%	Adequate knowledge

PART III

It consisted of three point likert attitude scale which included 10 items, to assess the attitude of the person on sanitary latrine practice. The response of each item was rated as Disagree (0), Uncertain (1), and Agree (2). All 10 items are positive statements and categorized as

Score	Percentage	Level of Attitude
0-10	≤50	Unfavorable
11-15	51-75	Moderately favorable
16-20	≥76	Favorable

CONTENT VALIDITY

The content Validity of the tool was obtained from the experts in the field of nursing. The expert’s suggestions were incorporated and the tool was finalized, and used for the data collection.

Distribution of level of knowledge on sanitary latrine practice among National Rural Employment Guarantee Act Employees

N=100

Level of Knowledge	Pre Test		Post Test	
	N	%	N	%
Inadequate	96	96	0	0
Moderately Adequate	4	4	9	9
Adequate	-	-	91	91
Total	100	100	100	100

The above table reveals that 96(96%) study participants had inadequate knowledge whereas 4(4%) had moderately knowledge and none of the participants had adequate knowledge in pre-test. The post test score reveals that 9 (9%) study participants had moderately adequate knowledge whereas 91 (91%) had Adequate knowledge.

Distribution of level of Attitude on sanitary latrine practice among National Rural Employment Guarantee Act Employees

N=100

Level of Attitude	Pre Test		Post Test	
	N	%	N	%
Unfavorable	85	85	0	0
Moderately favorable	0	0	18	18
Favorable	15	15	82	82
Total	100	100	100	100

The above table reveals that 85(85%) study participants had unfavorable attitude and 15(15%) had favorable attitude in pre-test. The post-test attitude scores disclosed that 18(18%) of the participants had moderately favorable attitude and 82(82%) had favorable attitude on sanitary latrine practice.

DISCUSSION

The findings of the study were discussed based on the objectives.

The first objective was to identify the effectiveness of sanitary latrine practice awareness programme on knowledge and attitude among National Rural Employment Guarantee Act Employees (NREGA) at selected rural area in Chengalpattu district.

A total of 100 study participants were recruited by non- purposive sampling technique. The pre-test was conducted on knowledge and attitude and then sanitary latrine practice awareness programme was implemented and the post-test was conducted. The distribution of level of knowledge on sanitary latrine practice among study participants disclosed that 96(96%) had inadequate knowledge and 4(4%) had moderately adequate knowledge in the pre-test, none of the study participants had adequate knowledge in the pre-test whereas 91 (91%) had adequate knowledge in the post-test. This result proved that sanitary latrine awareness programme had contributed positively on the knowledge on sanitary latrine practice among study participants.

The paired 't' value on comparison of pre and post-test knowledge score on sanitary latrine practice elicited that there was statistically significant difference at $p < 0.001$ with the pre and post-test mean score of 4.69 and 17.49 respectively. The greater mean difference between pre and post-test 12.8 yielded significant result in the paired 't' value ($t = 60.99$).

These findings were substantiated by a study conducted by sidharajjeratagi et. al(2017) which revealed that there was statistically significant difference pre and post- test knowledge $p < 0.05$ it evidenced from the above findings that structured sanitary latrine practice among people.

Hence H_1 - "There is a significant difference between pre and post-test level of knowledge on sanitary latrine practice among National Rural Employment Guarantee Act Employees (NREGA) who are subjected to sanitary latrine practice awareness programme" is accepted.

The distribution of level of attitude on sanitary latrine practice among study participants unveiled that 85(85%) study participants had unfavorable attitude in the pre- test. Only 15(15%) had favorable attitude in the pre-test. Whereas 82(82%) had favorable attitude in the post-test. None of the study participants had moderately favorable attitude in the pre-test but in the post-test it was improved to 18(18%). These findings highlights that sanitary latrine practice had brought positive impact on attitude of the study participants regarding sanitary latrine practice.

The paired 't' value had comparison of pre and post-test attitude regarding sanitary latrine practice was 23.1 which was statistically significant at $p < 0.001$. It reveals that sanitary latrine practice was very effective in improving the attitude of the study participants on sanitary latrine practice.

These findings were supported by a study conducted by Nelson Roy (2013) which revealed that structured teaching programme on sanitary latrine practice enhanced the attitude of the public on sanitary latrine practice. It is proved from the above evidence that awareness programme enhances the knowledge and attitude.

Hence H_2 - "There is a significant difference between pre and post-test level of attitude on sanitary latrine practice awareness programme among national rural employment guarantee act employees who are

subjected to sanitary latrine practice awareness programme” is accepted.

The second objective was to associate the demographic variables with the level of knowledge and attitude on sanitary latrine practice among national rural employment guarantee act employees at selected rural area in Chengalpattu district. The chi-square value on association of knowledge and attitude with demographic variables revealed no significant result.

This study result proved that sanitary latrine practice awareness programme had improved the knowledge and attitude on sanitary latrine practice among national rural employment guarantee act employees at a selected rural area in Chengalpattu district.

MAJOR FINDINGS OF THE STUDY

- It revealed that 67 (67%), 20 (20%), 7 (7%), and 6 (6%) study participants belong to 31 to 40 years, 20 to 30 years, 41 to 50 years and 51 to 60 years respectively.
- Out of 100 study participants 74 (74%) and 26 (26%) study participants belong to females and males respectively.
- With regard to the distribution of religion of the study participants 46 (46%) were Hindus, 34 (34%) were Christians, 17 (17%) were Muslims and 3 (3%) belonged to other religion.
- On account of educational status majority of 64 (64%) study participants had primary education, 30 (30%) had secondary education and 6 (6%) had Informal Education.
- With respect to the marital status of study participants 50 (50%), 29 (29%), 20 (20%) and 1 (1%) were married, Widowed, Unmarried and Divorced.
- Majority of the 68 (68%) study participants belong to joint family whereas 32 (32%) were in nuclear family.
- Regarding the number of children in the family most of them 57 (57%) had two and 24 (24%) had three and 11 (11%) had more than three and 8 (8%) had one children.
- Among 100 study participants 60 (60%) had the monthly income up to Rs.6001 –8000, 33 (33%) had between Rs.4001 – 6000, 4 (4%) had Rs.4000 and the remaining 3 (3%) had above Rs.8000.
- The distribution of defecation practice denoted that 64 (64%) and 19 (19%) study participants had open field defecation practice and sanitary latrine practice respectively where as 17 (17%) had both open field and sanitary latrine practice.
- With regard to the source of previous information on sanitary latrine practice 37 (37%), 37 (37%), 22 (22%), and 4 (4%) received the information from healthcare personnel, media, family members and volunteers respectively.
- The comparison of pre and post test scores of knowledge and attitude on sanitary latrine practice within study group by using paired “t” test unveiled that there was a statistically significant at level $p < 0.001$.
- Association of demographic variables with level of knowledge on sanitary latrine practice among National Rural Employment Guarantee Act Employees by using Chi-square test depicted that no association among study participants.

CONCLUSION

The study finding proved that the Sanitary Latrine Practice Awareness Programme administered by the investigator was effective to increase the knowledge and attitude of the National Rural Employment Guarantee Act Employees on Sanitary Latrine Practice.

Recommendations

1. A similar study can be replicated on a large sample for wider generalization.
2. A comparative study can be done to compare the effectiveness of Sanitary Latrine Practice, among various population.
3. The same study can be conducted in different settings like rural and urban across India.

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