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A study to assess the effectiveness of planned teaching on knowledge regarding measles among the general population of village Bhopal city, Madhya Pradesh

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Abstract

India are scrambling to contain the outbreak of Measles among the population aged under-five, for whom the disease, typically accompanied by a fever, cough and a distinctive maculopapular rash, can be fatal. Over 25,000 cases of measles and 1,965 cases of Rubella, a related, more virulent form of viral disease, have been reported in 2022. The worst-hit states have been Bihar, Gujarat, Haryana, Jharkhand, and Maharashtra, but even states like Kerala, widely seen as the best performing state on vital health parameters, including maternal and child immunizations, have seen localised outbreaks of the highly contagious disease.

Methods: The conceptual framework adopted for the study was based on modified J.W. Kenny's Open System Model Theory methodology adopted for assessing the knowledge through planned teaching regarding measles to general population of village, of Bhopal (MP) It includes research approach, research design, setting of the study, population, variable, sample size, sampling technique, criteria for sample selection, tool preparation and scoring, reliability and flexibility of the study method of data collection and statistical analysis and also emphasis on particular methodology adopted by the investigator to conduct the study. The sample consists of the units that compose accessible population. In this study sample size is 110 where selected purposively to suit the study. The tool use for generating data was a knowledge regarding measles. Theoretical knowledge and guidance from the expert and review of literature helped in developing the tools necessary for the study. Which was also translated to Hindi and distributed for enhancing the knowledge regarding measles.

Results: The purpose of the current study is to assess the knowledge regarding measles among general population of village Bhopal (M.P) 18.2% of people in the post test had good levels of knowledge and 80.9% had very good levels, according to the distribution of participant. The overall mean knowledge scores of the pre-test and post-test of participant show that the post-test mean score was higher (16.49 with SD of 1.780) when compared with the pre-test mean knowledge score value of 6.17 with SD of 2.120, the calculate value is 37.374, and the tabulated p value is 0.0001. Therefore, assessment of knowledge regarding measles among general population of village Bhopal (M.P) is statistically interpreted. H₂-there is a significant association between the levels of knowledge regarding measles among general population of village with selected socio demographic variable is rejected at 0.05 level of significance.

Conclusion: There is need to impart more knowledge to assess the effectiveness of planned teaching on knowledge regarding measles among the general population of village Bhopal (MP). The aimed to improve the level of knowledge of general population. They predetermined certain objectives to precede the study. The result of this study shows 80.9% of participants in post-test had very good level of knowledge and 18.2% had good level of knowledge was found effective as a teaching strategy.

Keywords: Madhya Pradesh, effectiveness of planned teaching, teaching strategy

Introduction

Background: India are scrambling to contain the outbreak of Measles among the population aged under-five, for whom the disease, typically accompanied by a fever, cough and a distinctive maculopapular rash, can be fatal. Over 25,000 cases of measles and 1,965 cases of Rubella, a related, more virulent form of viral disease, have been reported in 2022. The worst-hit states have been Bihar, Gujarat, Haryana, Jharkhand, and Maharashtra, but even states like Kerala, widely seen as the best performing state on vital health parameters, including maternal and child immunizations, have seen localised outbreaks of the highly contagious disease.

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Measles, a very preventable disease with just two shots of the vaccine providing lifelong immunity, had been largely brought under control in India, which has among the world's largest public health immunization programmes. However, the programme stumbled and fell behind in its schedule of vaccinating infants when the primary focus of the nation's health

The severity and longevity of the COVID pandemic caught the country's health authorities off-guard, allowing Measles, another highly contagious virus, to enter and, this time, catch the infant population in congested areas, including in the financial capital Mumbai, in a deadly grip. The WHO have reported decreasing trends in measles mortality. Simons and colleagues India accounted for about 50% of global measles mortality in 2010.



Fig 1: Vaccination against MR is a two-dose course, starting with the first dose at 9 months through 15 months of age, and the second dose at 4 through 6 years of age

Roop Sharma et al. 2021 [38]

A descriptive study conducted on Adverse events associated with Measles vaccination campaign 2019 in India the results shows that the common presenting complaint was fever (44.8%), followed by vomiting (34.5%), abdominal pain and dizziness (31%). Abnormal body movements were noted in two children (6.8%) on first day and in one child on fifth day of vaccine administration. Two children (6.8%) presented with generalized macular rashes all over the body on 4th day after vaccination. Altered sensorium on same day of vaccine administration was the presenting symptom of one child. All children improved gradually and were discharged after few days with no mortality or long-term morbidity. Investigations were done according to the protocol of the unit; nothing came significant to be reported. Neither of the children had positive blood culture.

Operational Definitions

Assess: According to the Oxford dictionary. According to Oxford dictionary, "Assess means to make a judgement about the nature or quality of somebody or something". In this study, assess means to evaluation of the current knowledge regarding awareness of the measles.

Madhu Gupta et al. 2019 [37]

A descriptive study conducted on Seroprevalence of measles, antibodies among 5-10 years old children in India the results shows that the Protective seroprevalence of MMR antibodies was 40.8, 75.5 and 86.2 per cent, respectively. The geometric mean titres of MMR IgG antibodies in the study children were 11.3, 50.6 and 54.3 international units (IU)/ ml, respectively. The proportion of seroprotected children for measles was significantly higher among those who had received two or more doses (46.4%) of measles vaccine compared to those who had received single dose (35.6%) ($P < 0.001$). About 16 per cent of children had received single dose of MMR vaccine. Among these, 71.4 and 100 per cent were seroprotected against respectively.

Effectiveness: According to the Oxford dictionary, "effectiveness" means the capability of producing a desired result or the ability to produce desired output.

Planned Teaching: According to the Oxford dictionary, in this study it refers to a material used for teaching the research sample on knowledge about awareness of Measles which is prepared by researchers and content validated by experts

Knowledge: According to the oxford dictionary. According to Oxford Advancement Learner's Dictionary, "Knowledge means the information, understanding and skills that you gain through education or experience. In this study, knowledge means to awareness of Measles among the general population.

Measles: According to the oxford dictionary. "An infectious disease, especially of children, that causes a fever and small red spots that cover the whole body".

In this study it refers to the infectious and communicable disease which researcher wants to estimate the knowledge among general population of village Bhopal city (Madhya Pradesh).

Methods

The conceptual framework adopted for the study was based on modified J.W. Kenny’s Open System Model Theory methodology adopted for assessing the knowledge through planned teaching regarding measles to general population of village, of Bhopal (MP) It includes research approach, research design, setting of the study, population, variable, sample size, sampling technique, criteria for sample selection, tool preparation and scoring, reliability and flexibility of the study method of data collection and statistical analysis and also emphasis on particular methodology adopted by the investigator to conduct the study. The sample consists of the units that compose accessible population. In this study sample size is 110 where selected purposively to suit the study. The tool use for generating data was a knowledge regarding measles. Theoretical knowledge and guidance from the expert and review of literature helped in developing the tools necessary for the study. Which was also translated to Hindi and distributed for enhancing the knowledge regarding measles.

Criteria for sample selection

Inclusion Criteria

- Willing to participate and available at the time of data collection.
- Present at the time of data collection.
- Able to understand read and write Hindi or English.

Exclusion Criteria

- Those who are mentally ill.
- Available at the time of data collection.
- Those are not willing to participate.
- Able to understand read and write Hindi or English.

Tools to be used: Instrument used for this study

1. Demographic factor.
2. Knowledge questionnaire regarding measles.

3. Pre-test and post-test questionnaire.

Conceptual framework

The framework of the present study is based on The open system model proposed by J.W. Kenny’s Open System Model Theory is based on the knowledge regarding through planned teaching regarding measles to general population of village, concepts of input, throughput, output, and feedback A system is made up of several components that work together to accomplish a certain objective. The changes brought on by interactions between numerous components in a scenario are the focus of this system theory. Every biological system is open, allowing for a constant flow of information, energy, and matter. The degree of interaction between an open system and its surroundings varies. In this present study “To assess the effectiveness of planned teaching on knowledge regarding measles among the general population of village Bhopal city (M.P.).

The following are the concept of the theory:-

Input: In this study the input is considered as awareness and existing knowledge of general population regarding measles disease. This is being influenced by various factor like age (in year), gender, occupation, previous knowledge regarding Measles and Measles vaccination, source of information about MR vaccination, & belief on vaccination programme.

Throughput: It refers to the process by which the system process input and releases an output. In present study throughput refers to the presentation of planned teaching and the reinforcement of knowledge regarding measles in general population considered for processing the input.

Output: In the study output refers to increased knowledge score regarding the measles. It can be assessed by post-test feedback, statically measurement of score obtained by subject expert and post questionnaire.

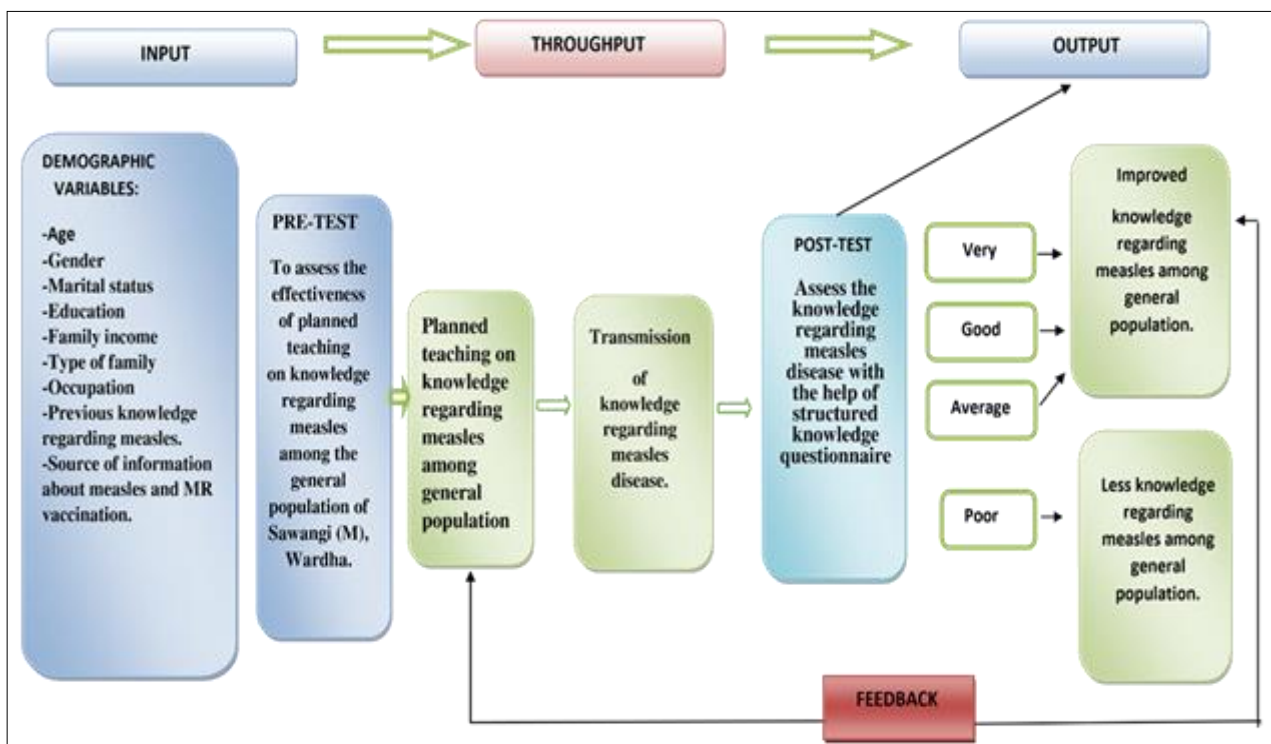


Fig 2: Conceptual Framework Based on J.W. Kenny’s Open System Model Theory

Research Design

A research design is a comprehensive strategy for how to answer the research question, deal with some of the challenges that might arise, and improve the study's specification for use in the research process. The study design aids in subject selection, experimental variable manipulation, data collecting procedures, and the sort of statistical analysis to be performed to interpret the findings. In the present study pre-experimental one group pre-test and

post-test design were used. A pre-test was administered by means of structured questionnaire depicted as O1 and then planned teaching given depicted as X. a post test was conducted using the same structured questionnaire depicted as O2.

A researcher's overall plan for obtaining answers to the research questions or for testing the research hypothesis is referred to as the research design.

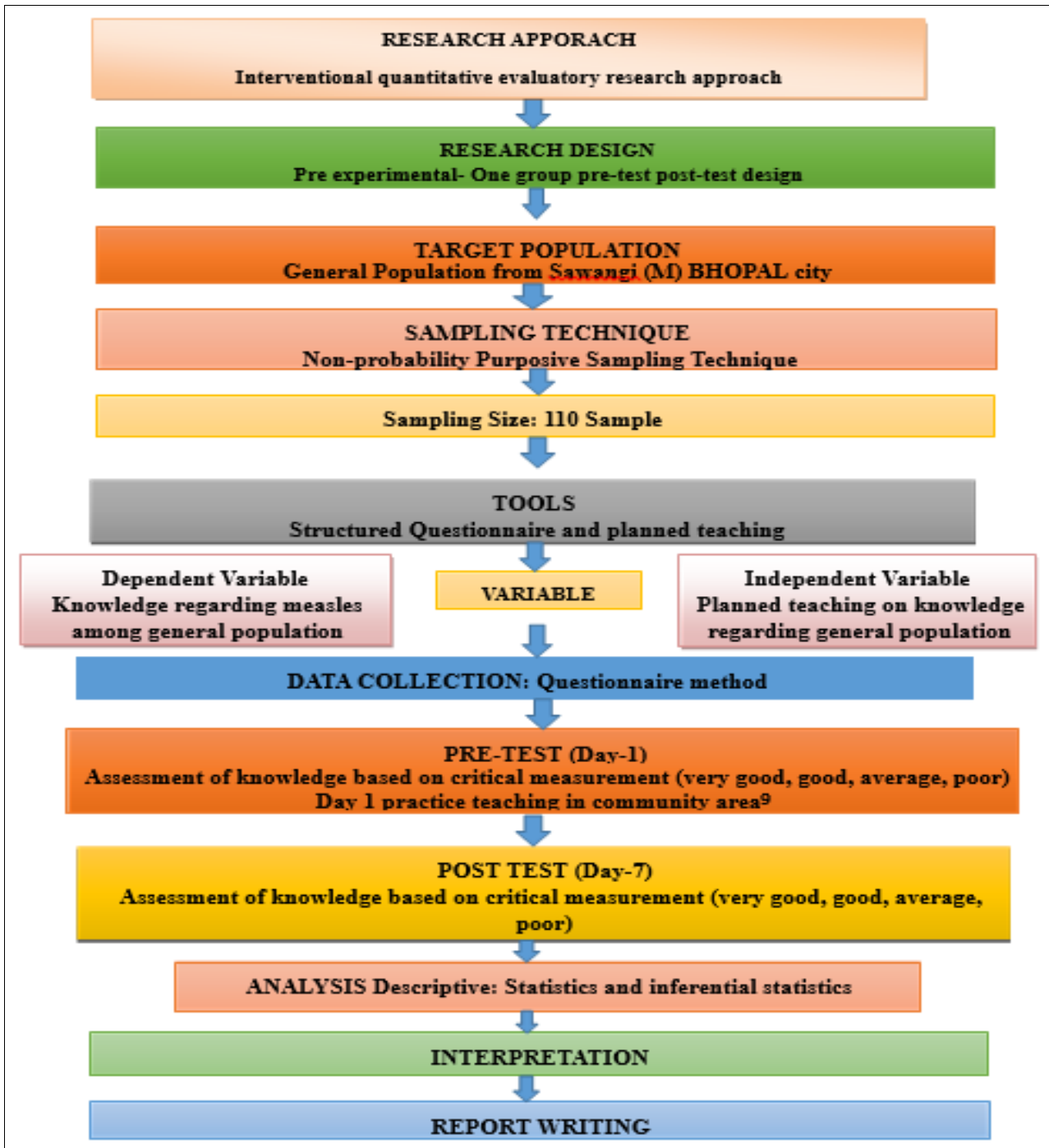


Fig 3: Schematic presentation of research design

Results

In this study 110 samples were taken for the research. According to the results, 18.2% of participant who gave the post-test had good knowledge, and 80.9% had very good knowledge. The overall mean knowledge scores of

participants of general population pre-test and post-test show that, compared to the pre-test mean knowledge score value of 6.17 with SD of 2.120, the post-test mean score was higher at 16.49 with SD of 1.780. The calculate value is 37.374 and the tabulated p value is 0.0001, so H1 is

statistically accepted. Therefore, statistical analysis suggests that the planned teaching program among general population village Bhopal (M.P) was successful in providing knowledge regarding measles among general population of village Bhopal (M.P) H2-there is a significant association between the levels of knowledge regarding measles among general population of village with selected socio demographic variable is rejected at 0.05 level of significance.

Conclusion

1. 18.2% of participant who gave the post-test had good knowledge, and 80.9% had very good knowledge. The overall mean knowledge scores of participants of general population pre-test and post-test show that, compared to the pre-test mean knowledge score value of 6.17 with SD of 2.120, the post-test mean score was higher at 16.49 with SD of 1.780. The calculate value is 37.374 and the tabulated p value is 0.0001, so H₁ is statistically accepted and null hypothesis H₀ is rejected at 0.05 level of significance.
2. Therefore, it can be concluded that a structured questionnaire were shown to be beneficial in assessing knowledge regarding measles among general population of village Bhopal (M.P.) no conclusive evidence linking knowledge of general population's sex to their age, marital status, education, family income per month, type of family, occupation, previous knowledge regarding measles, source of information about measles or believe in vaccination program. Therefore, statistical analysis suggests that the planned teaching and structured questionnaire was successful to assess the effectiveness of planned teaching on knowledge regarding measles among the general population of village Bhopal (M.P.).

Implications

Since the study reveals that there is The information contained in the planned teaching will help nursing staff in all settings, including hospitals and community settings, in their efforts to instruct individuals and to inform the community at large. The results will be used by the nursing staff to determine how effective the planned teaching was. The information in the planned teaching will assist the nursing staff to understand the meaning and definition much better, which will allow them to convey more effectively measles prevention among people. The findings of the present study have implication for nursing education, nursing practice, nursing administration and nursing research.

Conflict of Interest: Not available

Financial Support: Not available

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