



**“A DESCRIPTIVE STUDY TO ASSESS THE
EFFECTIVENESS OF STRUCTURED TEACHING
PROGRAMME REGARDING TYPHOID AND IT’S
PREVENTION AMONG ADULTS RESIDING IN
URBAN SLUM AREA BAHADURGARH,
HARYANA ”**

GUIDE

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ABSTRACT

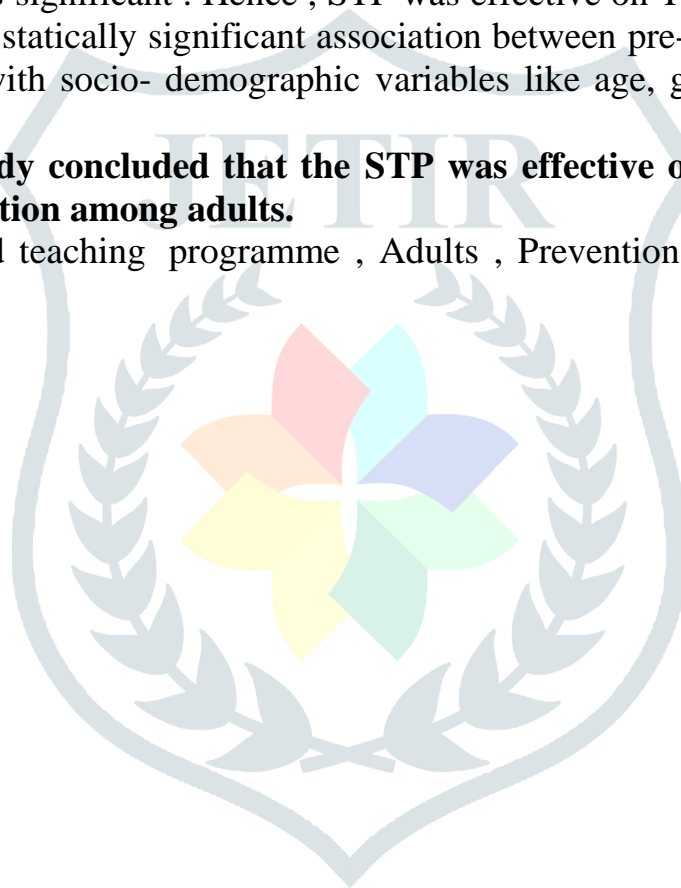
Background & Objective : The study aim to assess the effectiveness of STP regarding Typhoid and its prevention among adults residing in urban slum area, Bahadurgarh, Haryana.

Materials & Methods : The methodology of the present study was a Descriptive research design. Sample size of the study was 30 adults selected with purposive sampling technique. Socio-demographic variable and pre & posttest questionnaire was used for data collection. Data analysis was done to with the help of descriptive and inferential statistics.

Results: The study findings reveal with regard to questionnaire score the mean + S.D. of pretest value is 12.83 + 3.26 . But in post-test the mean + S.D. value is 21.6 + 2.76. The t value is 10.37 and the result is significant . Hence , STP was effective on Typhoid and its prevention among adults there was statically significant association between pre-test and post-test level of knowledge of sample with socio- demographic variables like age, gender, educational status etc.

Conclusion : The study concluded that the STP was effective on level of knowledge of Typhoid and its prevention among adults.

Keywords : Structured teaching programme , Adults , Prevention , Demographic variable, Knowledge.



CHAPTER-I

Introduction

CHAPTER-1

INTRODUCTION

“If you knew how unreasonably sick people suffer from reasonable cause of distress, you would take more pains about all these thing.”

-Florence Nightingale

BACKGROUND OF THE STUDY :

Salmonella enterica serovars Typhi and Paratyphi are the source of typhoid fever, a systemic gastrointestinal illness that results in 200,000 fatalities annually and an estimated 26.9 million cases worldwide. The majority of typhoid fever-related morbidity and mortality occur in young children in Asia and Africa. Children are highly exposed to fecal infections and lack natural protection. Untreated cases can result in a death rate of more than 10%, but with the right antibiotics, this number can be as low as 1%. The main way that typhoid fever is spread is via direct contact with an infected person's excrement, and the risk is greater in crowded places without access to cleanwater or good sanitation. procedures for food and water safety and handling, as well as household hygiene

According to recent data from the National Institutes of Health, environmental infection reservoirs might potentially aid in the spread of disease. Environmental variables that increase the risk of typhoid fever include living in low-lying locations, being near open sewers and highly contaminated water sources, and having rainy seasons.

Significant S. Typhi outbreaks have been connected to tainted municipal water sources, indicating the

significance of waterborne transmission as an environmental channel. It's uncertain if environmental factors influence endemic transmission in times between outbreaks.

The epidemiology and environmental factors contributing to *S. Typhi* infection in Africa, where the incidence in certain urban areas resembles high-burden regions of Asia, have not received much research. To better understand how environmental reservoirs contribute to the endemic transmission of typhoid fever in Africa, especially among youngsters who are more susceptible to infection, more research is required. By predicting the areas of highest risk, this data can help target immunization campaigns, better water and sanitation systems, and other community initiatives.

We estimated the geographic distribution of typhoid fever risk across a large disease surveillance cohort in Kibera, a densely populated urban informal community in Nairobi, Kenya, using a spatial modeling framework using meteorological and remotely sensed data. By looking for correlations between changes in the hydrologic landscape and the likelihood of typhoid fever, we investigated the role that environmental exposures played in the spread of the disease. According to these findings, environmental transmission may play a minor role in adult and teenage cases of typhoid fever, but it is a significant risk factor for young children.



Figure:1. Typhoid causing agent

NEED OF THE STUDY

Salmonella enterica serovar Typhi is the primary cause of typhoid disease, generally known as enteric fever. *S. Paratyphi A* also plays a minor role. These organisms exclusively exist in human populations. The primary carriers of the virus are the stool and urine of infected individuals; contaminated water, food, and flies are also significant conduits. This gastrointestinal infection is caused by a food or waterborne pathogen. The virulence of the organism and the infectious dosage are the primary determinants of the disease's onset and severity.

An estimated 26 million typhoid and 5 million paratyphoid A infections and 190,000 enteric fever fatalities occurred worldwide in 2010 as a result of typhoid fever. The disease is a significant public health concern in economically developing countries, especially in low-income Asian and Sub-Saharan African nations where the majority of people lack access to clean water, adequate sanitation, and hygienic infrastructure. Children under the age of 15 are typically more vulnerable to the illness, most likely as a result of adults developing immunity from subclinical and recurrent infections.

There is a dearth of data from community and hospital-based studies in India. The incidence of typhoid was only assessed in a small number of community-based research and seven hospital-based studies conducted in the last ten years, according to a comprehensive literature assessment of studies on enteric fevers in India. According to a comprehensive community research carried out in an urban slum area of India, the disease's incidence can reach 2/1000 people per year for children under five and 5.1/1000 people per year for children under ten. According to a similar study conducted in north India, children between the ages of five and twelve accounted for the majority of instances (24.8%).

Regrettably, the lack of estimates of the disease's nationwide burden has reduced the effectiveness of efforts to prevent and control enteric fevers.

Typhoid

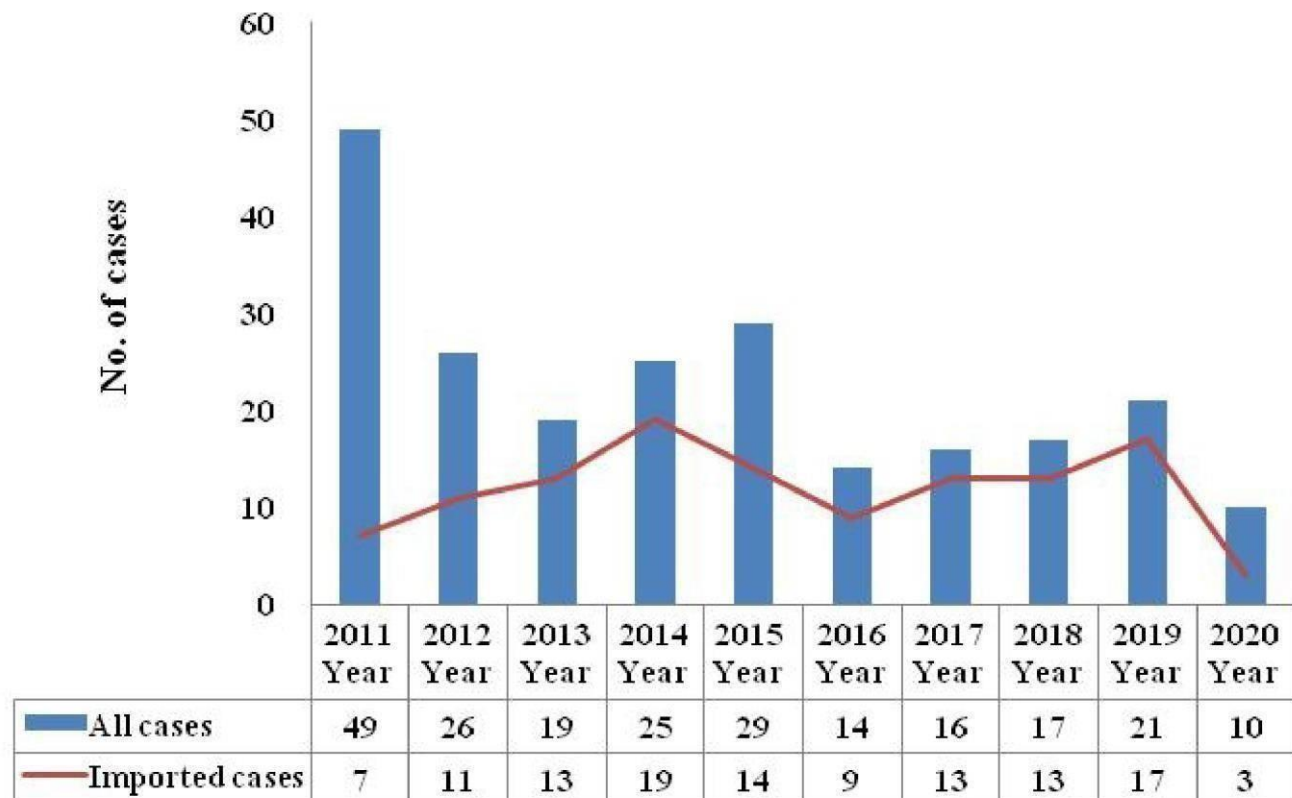


Figure : 2. Current prevalence of Typhoid

STATEMENT OF THE PROBLEM

“A Descriptive study to assess the effectiveness of structured teaching programme regarding Typhoid and its prevention among adults residing in urban slum area, Bahadurgarh, Haryana”.

OBJECTIVES

1. To evaluate people living in urban slums' current understanding of typhoid and how to prevent it
2. to determine the relationship between adult urban slum dwellers' knowledge of typhoid and sociodemographic factors
3. to evaluate the success of a systematic typhoid and preventive education program.

HYPOTHESIS

- H1: The STP will have a major impact on adults' understanding of typhoid and how to prevent it.
- Hypothesis 2: A noteworthy correlation will exist between the efficacy of STP in promoting typhoid awareness and preventing it in adult populations with socio-demographic characteristics.

OPERATIONAL

DEFINITIONS

- **Knowledge:** Knowledge is defined as information and understanding of facts attained through education.
- **Adult:** Someone who are more then18 years and less then30 years.
- **STP:** It is a type of teaching aids on typhoid and its prevention.
- **Effectiveness:** It refers to the extent outcome of STP on typhoid andits prevention.
- **Typhoid fever:** It is a systemic, enteric disease.
- **Assess:** To evaluate the pre-test and post-test outcomes.
- **Demographic variable:** Characteristics and attributes of the study subjects are considered as demographic variables.
- **Endemic:** A disease or condition present among a population at alltimes.
- **Reservoir:** Place in which an infectious agent can survive but may ormay not multiply.
- **Environment:** Sum total of all the living and non-living elements and their effects which influence human life.

ASSUMPTIONS

- ✓ TO assume that STP will increase the knowledge.
- ✓ STP will may effect the knowledge of adults on typhoid and itsprevention.

DELIMITATION

- ✓ Study limited to adult (18-30yrs).
- ✓ Study limited to sample size of 30.
- ✓ Study limited to urban slum area.

CONCEPTUAL FRAMEWORK

A theory's foundation is a conceptual framework. A conceptual framework offers guidance and momentum, which encourages study and knowledge expansion. It offers wide-ranging viewpoints for nursing practice, study, and instruction.

The conceptual framework contributes to science in a number of interconnected ways. Conceptualization is the process of transforming abstract ideas into concrete concepts through design, planning, and idea formation.

The goal of the current study is to evaluate how well STP works in Line Par, Bahadurgarh, to prevent typhoid disease in adults. This study is predicated on the system model developed by J.W. Kenney. The theory of the system is concerned with changes brought about by the interplay of several situational circumstances.

They are constantly exchanging material, energy, and information, which leads to some contact with the environment, from which the system gets material, energy, and information input and output.

INPUT:

Information, energy, and matter can all be fed into a system model, according to J.W. Kenney. The term "input" in this study refers to the gathering of demographic information, including age, gender, religion, place of residence, education, kind of family, monthly family income, and typhoid prevention.

THROUGH PUT:

Energy and information are input through the put process in order to maintain the system's equilibrium. Currently, STP on typhoid and its prevention is being provided by the study.

OUTPUT:

The return of matter, energy, and information to the environment in both psychological and physical activities is known as output. The effectiveness of STP in preventing typhoid in the experimental group is the current study's output.

FEEDBACK:

Feedback is seen as a method of evaluating the efficacy of Bahadurgarh in the current study, as seen by the differences in the pretest and posttest scores on the questionnaire. STP on adults' awareness of the harmful effects of smoking at PDM University,

SUMMARY

The need for the study, the problem statement, the purpose and hypothesis, operational definitions, assumptions, delimitation, and conceptual framework are all included in this chapter.

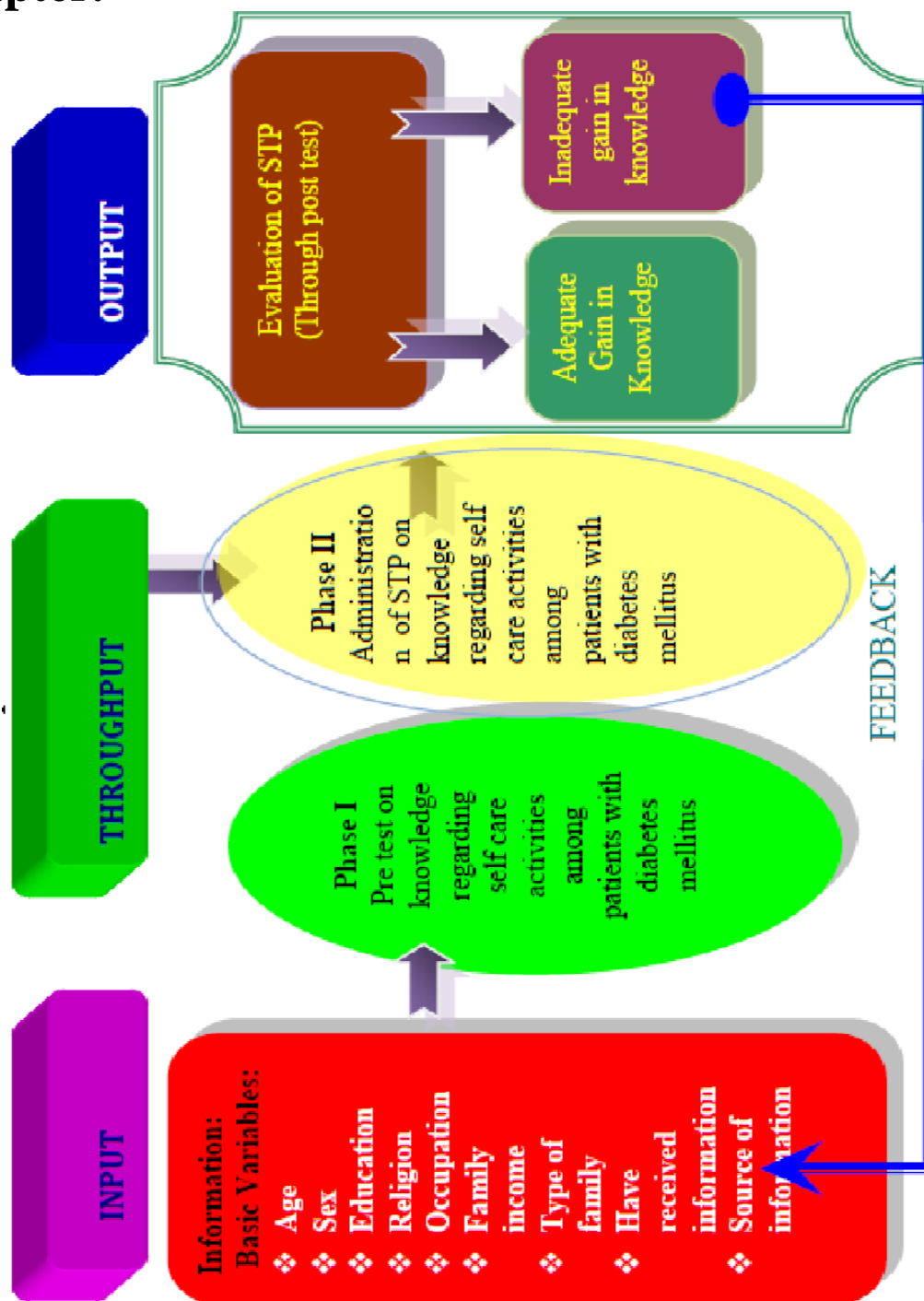
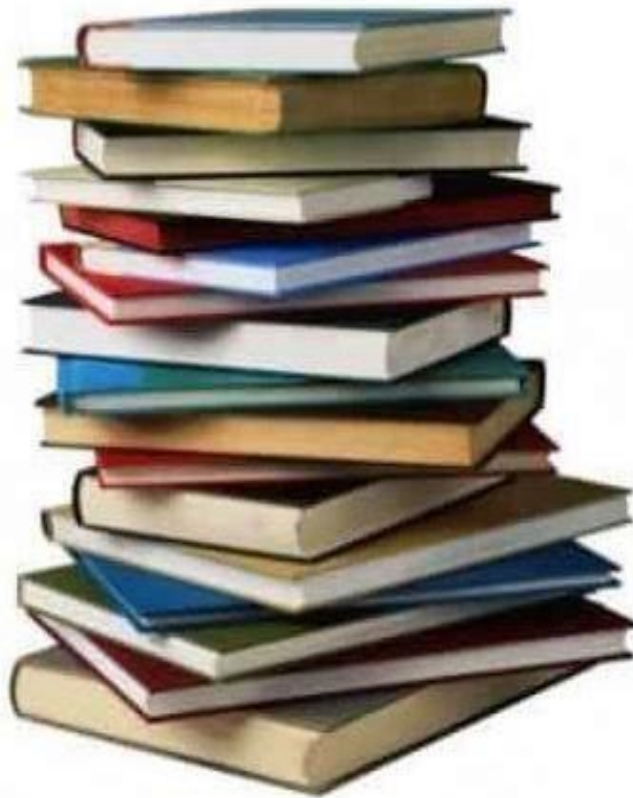


Fig: 1 Conceptual Framework of open system theory- By Bertalanffy and J.W Kenny.

CHAPTER-II

LITERATURE REVIEW



CHAPTER -2 REVIEW OF LITERATURE

Literature review is defined as a broad, comprehensive, in depth, systematic critique and synthesis of scholarly publications, unpublished, print and online materials, audio visual materials and personal communications.

(S.K. SHARMA)

REVIEWS RELATED TO TYPHOID AND ITS PREVENTION

Research on typhoid fever is conducted by Lauren Radice (uploaded on February 7, 2024). Typhoid fever is still prevalent today, particularly in developing nations. Typhoid is a deadly disease, hence precautions must be made to lower its incidence. One important component of prevention is vaccination. This is a phase II randomized observer-blind clinical trial involving 200 participants, ages 12 to 40, that is investigating a new Vi-DT conjugate vaccination.

Method: After the subjects were deemed eligible, a blood sample was obtained, and one vaccination dose was given. The experimental vaccine utilized was Vi-DT, while the control was Vi-PS. Subjects visited 28 days after immunization to provide a blood sample for immunogenicity assessment and to answer questions regarding local and systemic adverse events that happened during the first 28 days of the vaccination.

Results: A few subjects experienced mild negative responses. The most typical local response was pain. Pain in the muscles was the most frequent systemic response. Up to 28 days after the immunization, there were no significant side effects. In the Vi-DT group, rates were 100%, whereas in the Vi-PS group, they were 95.96%. GMTs following vaccination rose in both groups, with the Vi-DT group showing a statistically significant increase ($p < 0.001$).

John Wain, Rene S Hendriksen, Matthew L Mikoleit, Karen H Keddy, R Leon Ochiai (Published online on October 21, 2014) conducted study on control of typhoid fever relies on clinical information, diagnosis, and an understanding for the epidemiology of the disease. Despite the breadth of work done so far, much is not known about the biology of this human-adapted bacterial pathogen and the complexity of the disease in endemic areas, especially those in Africa. The main barriers to control are vaccines that are not immunogenic in very young children and the development of multidrug resistance, which threatens efficacy of antimicrobial chemotherapy. Clinicians, microbiologists, and epidemiologists worldwide need to be familiar with shifting trends in enteric fever. This knowledge is crucial, both to control the disease and to manage cases. Additionally, salmonella serovars that cause human infection can change over time and location. In areas of Asia, multidrug-resistant *Salmonella enterica* s *Typhi* (S *Typhi*) has been the main cause of enteric fever but now S *Typhi* is being displaced by infections with drug-resistant S *enterica* serovar Paratyphi A. New conjugate vaccines are imminent and new treatments have been promised, but the engagement of local medical and public health institutions in endemic areas is needed to allow surveillance and to implement control measures

Anita S, Amir KM, Fadzilah K, Ahmad J, Noorhaida U, Marina K, Paid MY, Hanif Z (Published on February, 2012) done research on Typhoid fever continues to pose public health problems in Selangor where cases are found sporadically with occasional outbreaks reported. In February 2009, Hospital Tengku Ampuan Rahimah (HTAR) reported a cluster of typhoid fever among four children in the pediatric ward. We investigated the source of the outbreak, risk factors for the infection to propose control measures. We conducted a case control study to identify the risk factors for the outbreak. A case was defined as a person with S. typhi isolated from blood, urine or stool and had visited Sungai Congkak recreational park on 27th January 2010. Controls were healthy household members of cases who have similar exposure but no isolation of S. typhi in blood, urine or stool. Cases were identified from routine surveillance system, medical record searching from the nearest clinic and contact tracing other than family members including food handlers and construction workers in the recreational park. Immediate control measures were initiated and followed up. Twelve (12) cases were identified from routine surveillance with 75 household controls. The Case-control study showed cases were 17 times more likely to be 12 years or younger (95% CI: 2.10, 137.86) and 13 times more likely to have ingested river water accidentally during swimming (95% CI: 3.07, 58.71). River water was found contaminated with sewage disposal from two public toilets which effluent grew salmonella spp. The typhoid outbreak in Sungai Congkak recreational park resulted from contaminated river water due to poor sanitation. Children who

accidentally ingested river water were highly susceptible. Immediate closure and upgrading of public toilet has stopped the outbreak.



Cheng YJ, Tang FY, Bao CJ, Zhu YF, Liang Q, Hu JL, Liu WD, Wu Y, Reilly KH, Shen TQ, Zhao Y, Peng ZH, Yu RB, Wang H, Shen HB, Chen F (Published on May, 2013) conducted study on analysis of the geographical distribution of typhoid incidence rates, based on various statistical approaches such as trend surface, spatial autocorrelation, spatial correlation and spatial regression, was carried out at the country level in Jiangsu province, People's Republic of China. Temperature, moisture content, proximity to water bodies and the normalized difference vegetation index in the autumn were the four underlying factors found to contribute the most to the development of the epidemic. Typhoid infection was most severe in the south-eastern region of Jiangsu and a significant hotspot with high positive autocorrelation was detected in Taicang country in the south-east of the province. To improve the typhoid situation, intervention efforts should be concentrated in the south-eastern region of the province, targeting the hotspot and include reduction of lake pollution.

Crump JA, Mintz ED (Published on January 2010) conducted research on Typhoid and paratyphoid fever continue to be important causes of illness and death, particularly among children and adolescents in south-central and Southeast Asia, where enteric fever is associated with poor sanitation and unsafe food and water. High-quality incidence data from Asia are underpinning efforts to expand access to typhoid vaccines. Efforts are underway to develop vaccines that are immunogenic in infants after a single dose and that can be produced locally in countries of endemicity. The growing importance of *Salmonella enterica* serotype Paratyphi A in Asia is concerning. Antimicrobial resistance has sequentially emerged to traditional first-line drugs, fluoroquinolones, and third generation cephalosporins, posing patient treatment challenges. Azithromycin has proven to be an effective alternative for treatment of uncomplicated typhoid fever. The availability of full genome sequences for *S. enterica* serotype Typhi and *S. enterica* serotype Paratyphi A confirms their place as monomorphic, human-adapted pathogens vulnerable to control measures if international efforts can be redoubled.

Kanj SS, Kanafani ZA, Shehab M, Sidani N, Baban T, Baltajian K, Dakdouki GK, Zaatari M, Araj GF, Wakim RH, Dbaibo G, Matar GM (Published on June 2015) conducted study on the objective of this study was to examine the epidemiology and the clinical manifestations of typhoid fever as well as the susceptibility and strain relatedness of *Salmonella typhi* isolates in Lebanon from 2006 to 2007. A total of 120 patients with typhoid fever were initially identified from various areas of the country based on positive culture results for *S. typhi* from blood, urine, stools, bone marrow and/or positive serology. Clinical, microbiological and molecular analysis was performed on cases with complete data available. These

results indicated that drinking water was an unlikely mode of transmission of the infection. Despite increasing reports of antimicrobial resistance among *S. typhi* isolates, the vast majority of these isolates were susceptible to various antibiotic agents, including ampicillin, cephalosporins, quinolones, and trimethoprim/sulfamethoxazole. Molecular analysis of the isolates revealed a predominance of one single genotype with no variation in distribution across the geographical regions.

Kothari A, Pruthi A, Chugh TD (Published on August 2008) conducted research on Enteric fever is a disease of developing countries associated with poor public health and low socioeconomic indices. Cases of enteric fever occurring in travelers returning to the United States and the UK suggest that it is present across the developing world but that the Indian subcontinent represents a hotspot of disease activity. The best figures available for the global burden of enteric fever support this and suggest that Africa (50/100,000) has a far lower burden of disease than Asia (274/100,000).

Sánchez-Vargas FM, Abu-El-Haija MA, Gómez-Duarte OG (Published on April 2007) conducted research on *Salmonella* species are a group of Gram-negative enterobacteria and known human pathogens in developing as well as industrialized countries. Despite significant advances in sanitation, provision of potable water, and highly controlled food chain surveillance, transmission of *Salmonella* spp. continues to affect communities, preferentially children, worldwide. This review summarizes updated concepts on typhoidal and non-typhoidal *Salmonella* infections, starting with a historical perspective that implicates typhoid *Salmonella* as a significant

human pathogen since ancient times. We describe the epidemiology of this pathogen with emphasis on the most recent non-typhoidal Salmonella outbreaks in industrialized countries and continued outbreaks of typhoid Salmonella in underserved countries. An overview of clinical aspects of typhoid and non-typhoid infections in developing and industrialized countries, respectively, is provided, followed by a description on current treatment concepts and challenges treating multidrug-resistant Salmonella infections. We conclude with prevention recommendations, and recent research studies on vaccine prevention.

Wain J, Hendriksen RS, Mikoleit ML, Keddy KH, Ochiai RL (Published on 21 March, 2015) conducted research on control of typhoid fever relies on clinical information, diagnosis, and an understanding for the epidemiology of the disease. Despite the breadth of work done so far, much is not known about the biology of this human-adapted bacterial pathogen and the complexity of the disease in endemic areas, especially those in Africa. The main barriers to control are vaccines that are not immunogenic in very young children and the development of multidrug resistance, which threatens efficacy of antimicrobial chemotherapy. Clinicians, microbiologists, and epidemiologists worldwide need to be familiar with shifting trends in enteric fever. This knowledge is crucial, both to control the disease and to manage cases. Additionally, salmonella serovars that cause human infection can change over time and location. In areas of Asia, multidrug-resistant Salmonella enterica serovar Typhi (S Typhi) has been the main cause of enteric fever, but now S Typhi is being displaced by infections with drug-resistant S enterica serovar Paratyphi A. New conjugate vaccines are imminent and new treatments have been promised, but the engagement of local medical and public health institutions in endemic areas is needed to allow surveillance and to implement control measures.

Yaxian J, Hui Z, Hua N, Xiaoqin M, Fengliang L, Ning X, Jiajia L, Jie J, Rui Z. (Published on 15 April 2015) Typhoid fever is a common disease in Yunnan province; however, the resistant phenotype and epidemic characteristics of Salmonella in this area are still unclear. In this study, a 15-year surveillance of antimicrobial susceptibility of Salmonella is reported. **METHODOLOGY:** From January 1999 to December 2013, Salmonella isolates were recovered from patients in the First People's Hospital of Yunnan Province. Antimicrobial susceptibility was detected and data were analyzed using WHONET5.6. **RESULTS:** A total of 845 Salmonella isolates were recovered between 1999 and 2013. The most frequently isolated Salmonella serovar was S. Paratyphi A (93%), and 75.1% (635/845) of the isolates were from the young and middle-aged population. The resistance rates of Salmonella spp. to ciprofloxacin, ampicillin, and ceftriaxone increased dramatically during the 15 years. Carbapenems retained the highest and most stable activity against isolates. The resistance rates of all Salmonella isolates to chloramphenicol and sulfamethoxazole were 0.4% (3/845) and 1.8% (15/845), respectively. **CONCLUSIONS:** As Salmonella isolates have been observed to be resistant to first-line antibiotics, antimicrobial agents should be used rationally and prescriptions should be based on case-by-case susceptibility testing.

Sur D, Chatterjee S, Riewpaiboon A, Manna B, Kanungo S, Bhattacharya SK. (Published on December 2009) The purpose of this study was to estimate treatment cost for typhoid fever at two hospitals in Kolkata, India. This study was an incidence-based cost-of-illness analysis from the providers' perspective. Microcosting approach was employed for calculating patient-specific data. Unit costs of medical services used in the calculation were directly measured from the study hospital by standard method. The study hospitals were selected based on accessibility to data and cooperation. Eighty-three Widal-positive and/or culture-confirmed patients with typhoid fever during November 2003-April 2006 were included in the study. Most (93%) patients were children. Eighty-one percent was treated at the outpatient department. The average duration of hospitalization for child and adult patients was 8.4 and 4.2 days respectively. The average cost of treating children, adults, and all patients was US\$ 16.72, 72.71, and 20.77 respectively (in 2004 prices). Recalculation based on 80% occupancy rate in inpatient wards (following the recommendation of the World Health Organization) found that the cost of treating children, adults, and all patients was US\$ 14.53, 36.44, and 16.11 respectively.

Verma S, Thakur S, Kanga A, Singh G, Gupta P. (Published on January-March 2010) This retrospective study incorporates a six years, six months (January 2000-June 2006) laboratory data comprising 258 isolates of Salmonella. Cultures were identified by standard methods. Salmonella enterica serotype Typhi (S. Typhi) was the more frequent serotype isolated i.e., 61.62% with the remaining 38.37% being Salmonella enterica serotype

Paratyphi A (S. Paratyphi A). There was emergence of S. Paratyphi A as the predominant serotype in 2003-2004 with resurgence of serotype Typhi thereon. A total of 66.27% isolates were resistant to one or more antibiotics. MDR S. Typhi was 10.69% and while 13.13% were MDR S. Paratyphi

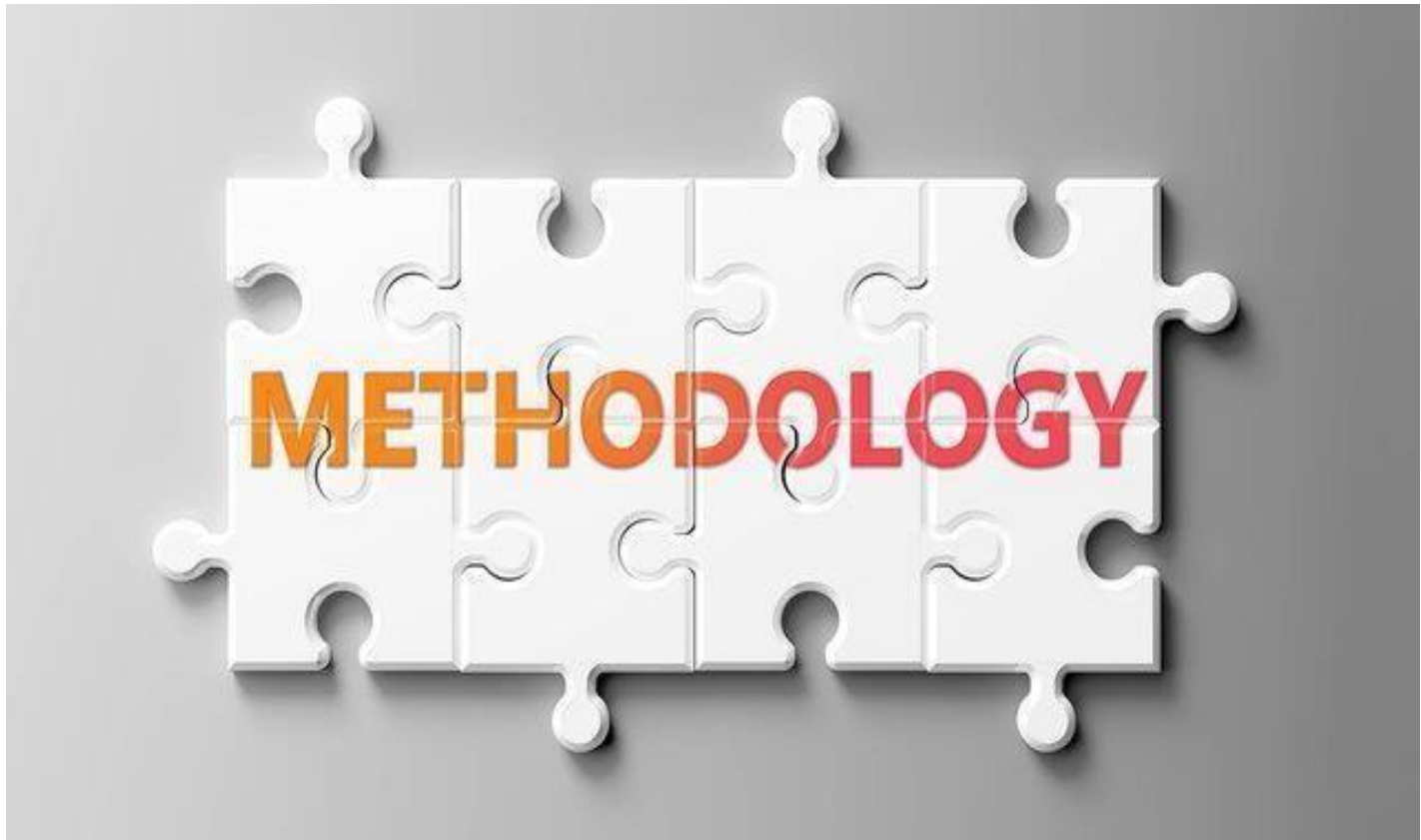
A. There was decrease in resistance to ampicillin, cotrimoxazole in 2004 and nalidixic acid beyond 2005 and increase in resistance to cefuroxime. We also documented a decrease in resistance to ciprofloxacin after 2005.

Darton TC, Blohmke CJ, Pollard AJ (Published on January 2014) PURPOSE OF REVIEW: Infection caused by ingestion of human-restricted Salmonella enterica serovars Typhi and Paratyphi predominantly affects the most impoverished sections of society. In this review, we describe recent advances made in estimating the burden of illness and the important role improved diagnostic tests may have in controlling infection and report the development of a new human challenge model of typhoid infection. RECENT FINDINGS: Typhoid continues to be a major cause of morbidity, particularly in children and young adults in southeastAsia, although accurate assessments are still hindered by the lack of reliable surveillance data. Recent reports of high rates of infection in Africa and the dominance of paratyphoid in several geographic areas are of particular concern. Diagnosis of enteric fever remains frustrated by the nonspecific clinical presentation of cases and the lack of test sensitivity. Methods to improve diagnostic accuracy are hindered by the incomplete understanding of immunobiological mechanisms of infection and lack of a suitable animal infection model. SUMMARY: Enteric fever is a major global problem, the burden of which has only partially been recognized. Control strategies utilizing cheap accurate diagnostics and effective vaccines are urgently required, and their development should be accelerated by the use of a human challenge model.

Jackson BR, Iqbal S, Mahon B; Centers for Disease Control and Prevention(CDC)(Published on March 2015) These revised recommendations of the Advisory Committee on Immunization Practices update recommendations published in MMWR in 1994 and include updated information on the two currently available vaccines and on vaccine safety. They also include an update on the epidemiology of enteric fever in the United States, focusing on increasing drug resistance in Salmonella enterica serotype Typhi, the cause of typhoid fever, as well as the emergence of Salmonella serotype Paratyphi A, a cause of paratyphoid fever, against which typhoid vaccines offer little or no protection.

Jain SK.(Published on 2009 October) conducted research on Typhoid fever remains a major health problem globally, particularly in the developing world. The increased emergence of several multidrug-resistant strains of Salmonella enterica serovar Typhi has made the management of the disease increasingly difficult. Although vaccines against typhoid fever are available, improvements are desired in dosage, immunogenicity and tolerability. Emergent BioSolutions Inc is developing M-01ZH09, a single-dose oral vaccine against typhoid fever based on an attenuated strain of S enterica serovar Typhi. Several clinical trials have been completed for the vaccine, including large phase II trials in the US and Vietnam. Additionally, a phase IIc clinical trial was ongoing in India at the time of publication. The available data suggest that M-01ZH09 is well tolerated in clinical trials, and is highly immunogenic, provoking broad immune responses. Because M-01ZH09 involves administration as a single oral dose, the vaccine has the potential to be used in a mass immunization program.

CHAPTER-III



CHAPTER – 3

METHODOLOGY

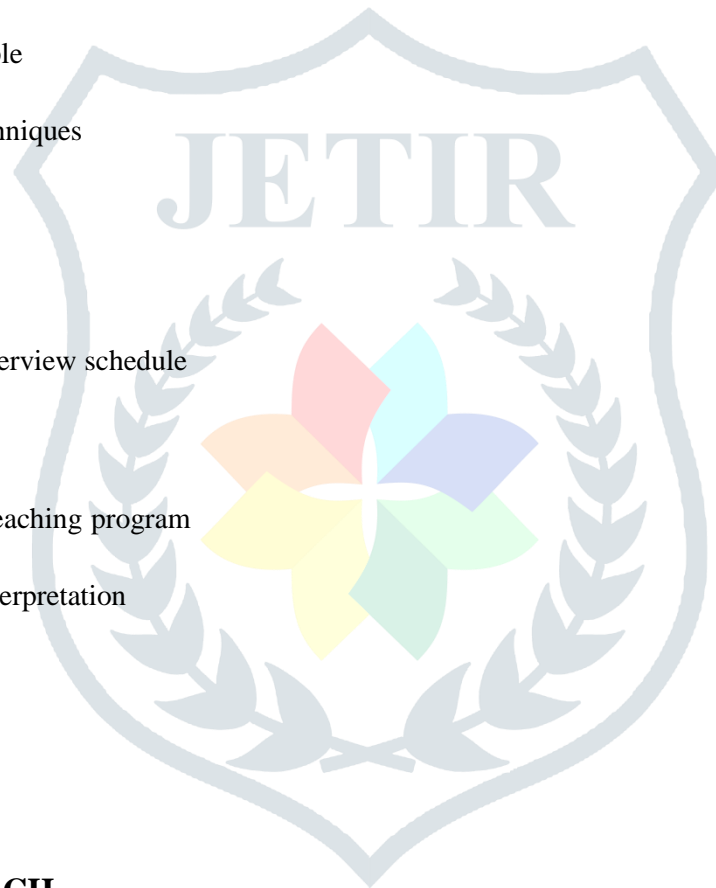
The methodical approach of doing research to address an issue is known as research methodology. The problem statement, study objectives, stated assumptions, data gathering techniques, statistical methods for data analysis, and the reasoning behind them are all included.

(KOTHARI C.R., 2006)

The purpose of this chapter is to provide an overview of the study's methodology. Research methodology refers to the overall structure used to arrange the process of obtaining accurate and trustworthy data for a study. This chapter provides a quick overview of the methodology used for the investigation.

This chapter contains the research methodology and design description of:

- Research approach
- Research design
- Variable under study
- Research Setting
- Population
- Sample and sampling technique
- Sample Size
- Criteria for selection of sample
- Data collection tools and techniques
- Description of tool
- Interpretation
- Development of structure interview schedule
- Content validity of tool
- Reliability of the tool
- Development of structured teaching program
- Plan for data analysis and interpretation
- Data analysis



RESEARCH APPROACH

The method used in research is the means of testing hypotheses and providing answers to queries. It outlines the fundamental steps involved in carrying out research. It involves organization, strategy, and a plan.

A research approach is a strategy intended to gather data from the public on a range of topics and facets.

(CHOUDHARY, 2010)

Given the goal of the current investigation, a quantitative research approach was deemed appropriate.

The study's quantitative pre-experimental research methodology and one group pre-test post-test design seek to

ascertain adult residents of Line Par, Bahadurgarh urban slum area's level of knowledge regarding typhoid and its prevention, as well as to evaluate the efficacy of structured teaching programs.

RESEARCH DESIGN

The overarching strategy for structuring a scientific investigation is shown by the research design. It aids in subject selection, variable manipulation, and choosing the appropriate statistical analytic techniques for data interpretation.

Plans and procedures for study design that cover the decision-making process from general hypotheses to specific techniques for gathering and analyzing data.

(POLIT AND BECK, 2010)

Accordingly, it is thought that a pre-experimental one group pre-test post-test design would be suitable for assessing the impact of a structured education program on typhoid and its prevention among adults living in the urban slum of Line Par, Bahadurgarh.

The layout modified for this investigation is:

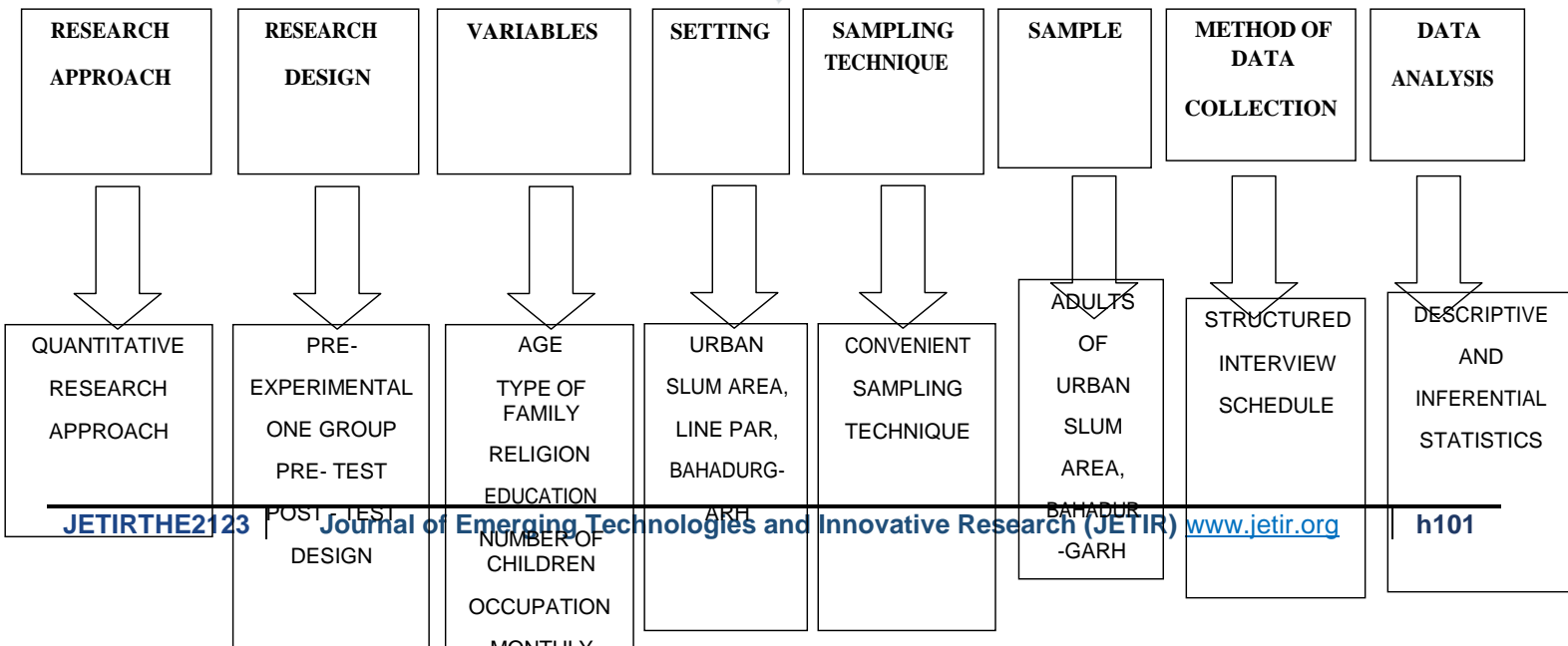


K1- Assessment of knowledge before the administration of structured teaching programme regarding typhoid and its prevention on day 1.

X- Administration of structured teaching programme among adults of urban slum area, Line Par , Bahadurgarh regarding typhoid and its prevention on same day/day 1.

K2- Assessment of knowledge of adults of urban slum area, Line Par, Bahadurgarh after the administration of structured teaching programme regarding typhoid and its prevention on day 7.

SCHEMATIC REPRESENTATION OF RESEARCH DESIGN



VARIABLES UNDER STUDY

A variable is an idea that has the ability to have numerical values assigned to it.(C.R. Kothari, 2006)

A variable is an attribute or quality of a subject that varies from the subject or objects under study. (For instance, age, sex)(NIESWIADOMY, 2009)

Something that can take on several values is called a variable.(HUNGLER AND POLIT)

This study identified three categories of variables: -

1.A stimulus or action that is altered or changed by the researcher in order to produce an effect on the dependent variable is known as an independent variable.

(SHARMA, S.K.)

The structured training program on typhoid and its prevention is the independent variable in the current investigation.

1. **DEPENDENT VARIABLE**-It is the outcome or response due to the effect of independent variable which the researcher wants to predict or explain.

(S.K. SHARMA,2011)

In the present study, the dependent variable is knowledge of adults of urban slum area, Line par , Bahadurgarh.

2. **ATTRIBUTE VARIABLE OR EXTRANEIOUS VARIABLE**-

Extraneous variables are the factors that are not the part of the study but may affect the measurement of the study variable.

(S.K. SHARMA,2011)

In the present study, the extraneous variables are- Age, Education status, Religion, Occupation, Residence, previous knowledge and family type.

RESEARCH SETTING

“Setting is the physical location and condition in which data collection takes place in the study.”

(POLIT AND BECK, 2010)

The selection of an appropriate setting is important because the setting can influence the way people behave or free how to respond.

(S.K. SHARMA, 2011)

The present study setting is Line Par, Bahadurgarh .

POPULATION

A population is the entire set of individuals having some common characteristics.

(POLIT AND HUNGLER,1999)

Population is a complete set of individual or objects that possess some common characteristics of interest of the

researcher. The researchers specify the broad population as well as the actual population that is available for the study.

(NIESWIADOMY, M. ROSE, 2008)

1. **TARGET POPULATION-** In the present study, the target population is all the adults of urban slum area, Line par, Bahadurgarh.
2. **ACCESSIBLE POPULATION-** The accessible population, includes all the adults of urban slum area, Line Par, Bahadurgarh.. These are selected according to inclusion and exclusion criteria.

In the present study, population is adults residing in Ward 6, Line par, Bahadurgarh.

SAMPLE AND SAMPLING TECHNIQUE

Sample is a small proportion of population selected for observation and analysis.

(POLIT S. HUMGLER)

In present study, sample comprised of 30 adults of urban slum area, Bahadurgarh. Sampling is the process of selecting a portion of population to represent entire population.

(POLIT & BECK, 2010)

Sampling is the process of selecting a representative segment of the population under study.

(S.K SHARMA., 2011)

Choice of sampling technique depends on the nature of problem, the kind of variable included in the study, the type of research and the number of sampling unit.

In the present study, Convenient Sampling Technique is used.

SAMPLE SIZE

Sample size is defined as the feasibility is not met if approach is made to whole population. Therefore, a sample is selected out of the population that should reflect population traits.

(S.K SHARMA)

- i) For the present study sample size is -30
- ii) Willing to participate in study.
- iii) Adults who can understand Hindi and English.

- **EXCLUSION-**

- i) Adults who are not willing to participate.

- ii) Adults who are not available at the time of study.

DATA COLLECTION TOOLS AND TECHNIQUES

The gathering of pertinent data, which supplies the study with the necessary knowledge, is the most significant and vital component of any investigation.

The most labor-intensive stage of the research process is data collecting, which entails speaking with respondents directly and indirectly to get information about the subject of the study.

(S.K. SHARMA)

The equipment a researcher uses to gather data is known as a data collection tool. The kind of information that must be gathered to address the research question determines the kind of data collection instrument needed.

(POLIT AND BECK)

A structured interview schedule was used for the current study to gauge adult participants' knowledge about typhoid and how to prevent it both before and after a structured training program was implemented.

DESCRIPTION OF TOOLS

Data for the current study were gathered using a standardized interview schedule.

1. There are two parts to the structured interview schedule: Part 1 is for demographic variables.

Part 2: Information on typhoid fever and how to prevent it

It is further split into three sections:

Section A – Questionnaire Regarding General Information and Epidemiology.

- **Section B** – Questionnaire Regarding Clinical Manifestations, Diagnosis & Treatment.
- **Section C** – Questionnaire Regarding Preventive Measures.

INTERPRETATION OF SCORES

Very good- > 23 [>75%]

Good- 19-22 [61-74%]

Average- 16-18 [50-60%]

Poor- <15 [50%]

DEVELOPMENT OF STRUCTURED QUESTIONNAIRE

A structured questionnaire is an instrument used to collect data from research subjects regarding their

knowledge, attitudes, beliefs, and feelings. It consists of a set of questions written by the researcher.

The question schedule was created subsequent to:

- Extensive review of research and non-research literature.
- Consultation with experts in the field and the related field.
- Discussion with peer group.
- Researchers professional experience.
- The expert opinion of the advisor was sought to ascertain in the clarity and appropriateness of items.

CONTENT VALIDITY OF TOOL

It is used to gauge how well an instrument's items capture the universe of its material and is based on the opinions of subject-matter specialists.

An instrument's validity is determined by its capacity to measure the variable it is designed to measure.

(NIESWAIA DOMY)

The extent to which an instrument measures what it is intended to measure is referred to as validity.
(S.K. Sharma)

Three experts were provided the instruments to measure the content validity. One expert in community health nursing, one in mental health nursing, and one in medical surgery nursing were chosen.

Based on their qualifications, clinical experience, area of expertise, and interest in the issue, the experts were selected.

Expert evaluation of the study's components was requested. Their recommendation led to the necessary alteration being implemented.

Language specialists translate the amended questionnaire into Hindi and back again into English. The

instrument proved to be reliable for carrying out the research.

RELIABILITY OF THE TOOL

One important factor in determining the tool's sufficiency and quality is its dependability.

The degree of consistency with which an instrument measures the attribute it is intended to assess is known as its reliability.

(POLIT AND HUNGLER, 1991)

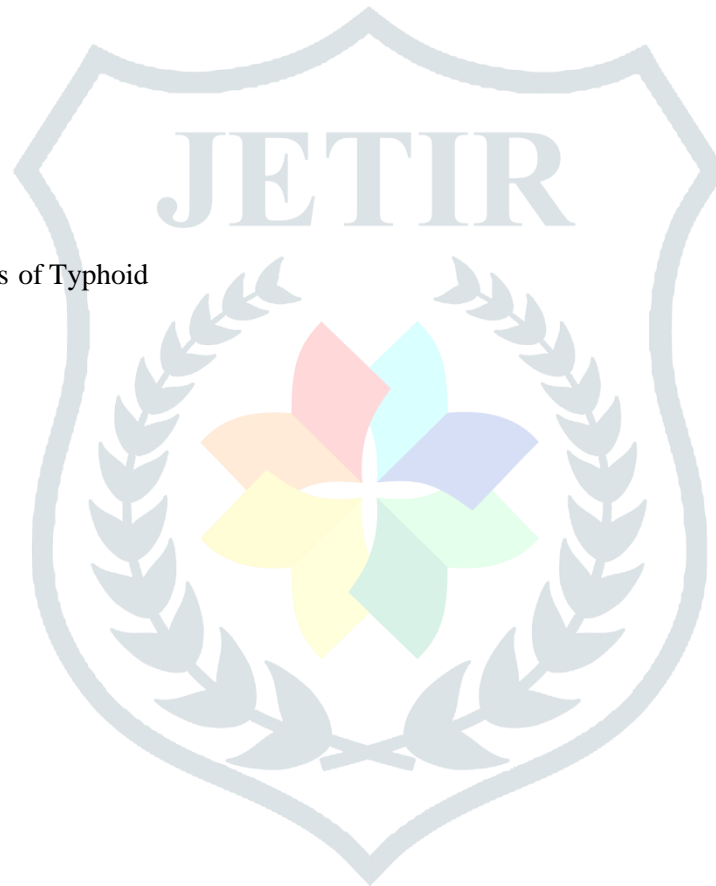
The degree to which the research instrument produces consistent results when measured again is known as its reliability.

(NIESWIADOMY M. ROSE, 2008)**DEVELOPMENT OF STRUCTURED TEACHING PROGRAMME**

The existing literature, the lesson plan on the given topic, prior experience, and the opinions of three experts—a community health nurse, a mental health nurse, and a medical surgery nurse—were reviewed in order to create the list of criteria.

THE CONTENT OUTLINE OF THE LESSON PLAN CONSISTS OF-

- Introduction of typhoid
- Definition of typhoid
- Incidence of Typhoid
- Epidemiological determinants of Typhoid
 - Agent factors
 - Host factors
- Mode of Transmission
- Incubation Period
- Clinical features of Typhoid
 - 1st week
 - 2nd week
 - 3rd week
- Diagnostic evaluation
- Complications
- Management
 - Medical Management
 - Surgical Management
 - Dietary Management
 - Immunization
- Prevention

**PLAN FOR DATA ANALYSIS AND INTERPRETATION**

Plan for data analysis was checked by employing descriptive and inferential statistics. The following plans of analysis is developed with expert's opinion:

- Compute frequency and percentage distribution to describe sample characteristics.
- Calculate mean and standard deviation of pre-test and post- test of knowledge scores.
- Calculating the value to find out the significant difference between pre-test and post-testknowledge scores.
- The findings will be interpreted with the help of pie charts and graphs.

DATA ANALYSIS AND INTERPRETATION

Sorting, organizing, modifying, and condensing data in order to find the answer to a research question is known as data analysis. Reducing data to a comprehensible and interpretable form allows for the study and testing of the research problem's relationship.

(POLIT AND HUNGLER, 1999)

Making inferences from data gathered during analytical or experimental study is the process of interpretation. In actuality, it's an effort to interpret research findings more broadly.

(KERLINGER, 1983)

Interpretation of tabulated data can bring to light the meaning of finding of the study.

(ABDELLAH AND LEVINE, 1973)

The researcher should express what he finds not only the words but also in a graphic presentation if data in the form of tables/ diagram.

(TREECE AND TREECE, 1973)

The chapter deals with the analysis and interpretation of the data collected by structured teaching programme from 30 adults of urban slum area regarding typhoid and its prevention.

THE ANALYSIS BASED ON THE FOLLOWING CRITERIA-

- To assess the pre-test knowledge score of adults of Urban slum community regarding typhoid & its prevention.
- To implement structured teaching programme on typhoid & its prevention.
- To evaluate the effectiveness of structured teaching programme on typhoid & its prevention.

SUMMARY

A systematic and scientific approach to research technique exposes the general design of the research challenge. The description of the study methodology, sample, sampling strategy, research environment, and data analysis plan were covered in this chapter. The ensuing chapter presents the analysis and interpretation of the outcome.

CHAPTER-IV



CHAPTER 4

ANALYSIS AND INTERPRETATION

This chapter evaluates the effectiveness of a structured education program on adult awareness of typhoid and its prevention by looking at the analysis and interpretation of data collected from thirty people living in urban slums in Bahadurgarh, Haryana.

The goal of data analysis is to convert the data into an intangible and comprehensible form so that the research subjects can be examined and tested. The research analyst has broken down the data into its constituent parts in order to identify the answers to the research questions and support the research hypothesis.

Polit and Hungler (1999): Describe it as a process of systematic organization and synthesizing data in such a way that research questions can be answered and hypothesis can be tested.

Kerlinger (1983): Defined analysis as the categorising, ordering, manipulating and summarising of data to obtain answer to research questions. The purpose of analysis is to reduce the data to intelligible and interpretable form, so that the relation of respective problem can be studied and tested.

Treese and Treese (1973): Stated that the researcher should express what he found, not only the words but also in a graphic presentation of data in the form of tables/diagram.

The analysis based on following objectives:

- 1) To assess existing knowledge of adults of urban slum area regarding typhoid and its prevention.

- 2) To find out the association of knowledge of adults of urban slum area regarding typhoid with selected factors:
- Type of family
 - Religion
 - Education
 - Occupation
 - Family income
 - Number of children
 - Age of children
 - Source of drinking water
 - Sanitation facility
 - Waste disposal
 - Previous information about typhoid and its prevention
 - Vaccination
- 3) To assess the effectiveness of structured teaching program on typhoid and its prevention

DATA COLLECTION AND INTERPRETATION

The study was intended to provide knowledge to the adults on typhoid & its prevention.

The study was conducted in Bahadurgarh, Haryana. A total of 30 samples were selected and data was collected and analyzed by using differential and inferential methods and presented in the forms of tables and figures.

TABLE :1 SECTION :1

ANALYSIS OF SOCIO DEMOGRAPGIC DATA

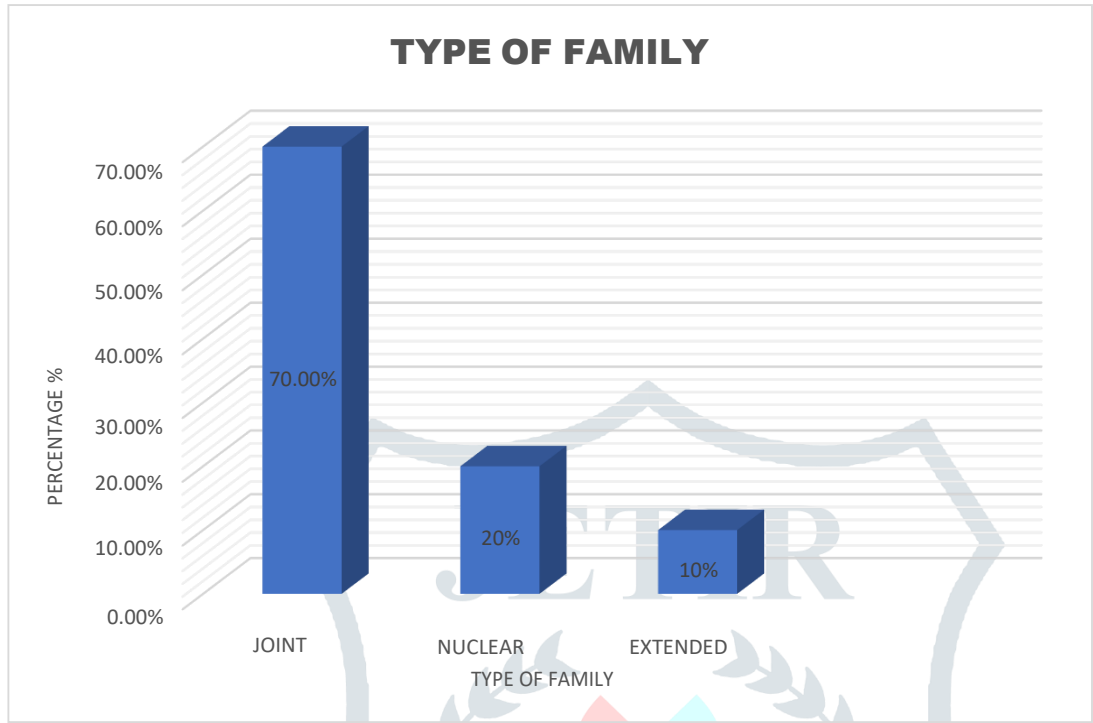
DEMOGRAPHIC	FREQUENCY	PERCENTAGE
AGE		
a. 18-26	8	26.6%
b. 27-35	7	23.3%
c. 36-44	4	13.3%
d. 45-53	6	20%
e. 54-62	5	16.66%
GENDER		
Male	8	26.66%
Female	22	73.33%
Other	0	0%

TYPE OF FAMILY		
Joint	21	70%
Nuclear	6	20%
Extended	3	10%

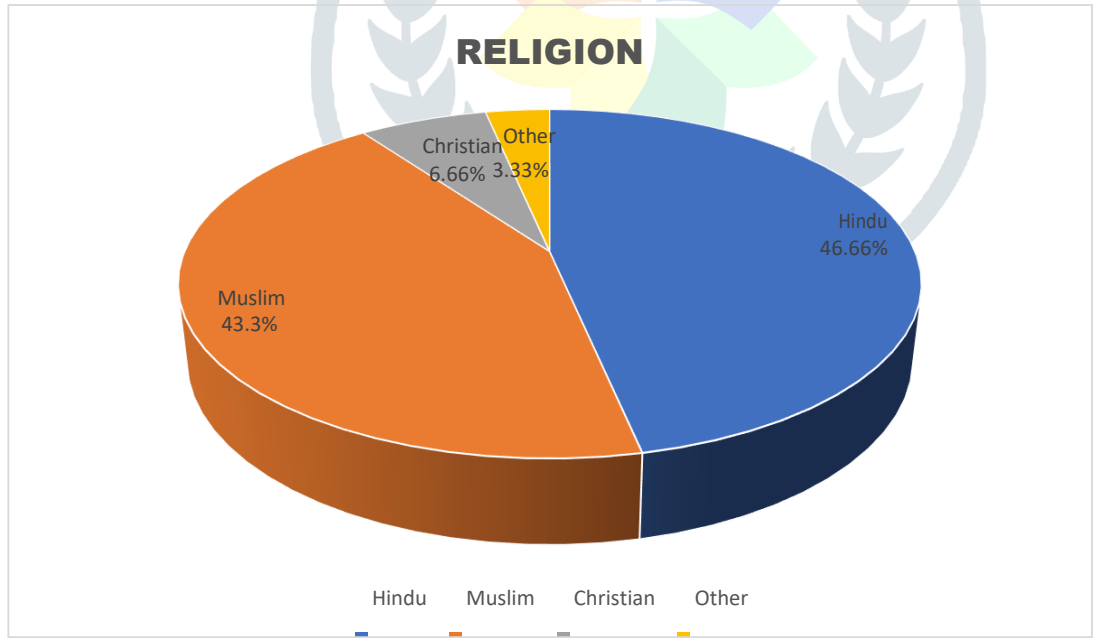
RELIGION		
Hindu	14	46.66%
Muslim	13	43.33%
Christian	2	6.66%
Other	1	3.33%
EDUCATIONAL STATUS		
Illiterate	5	16.66%
10 th Passed	15	50%
12 th Passed	6	20%
Graduated and above	4	13.33%
OCCUPATIONAL STATUS		
Government job	1	3.33%
Private job	11	36.66%
Home maker	13	43.33%
Others	5	16.66%
FAMILY INCOME (MONTHLY)		
a. < Rs.10,000	8	26.66%
b. Rs.10,001-Rs.20,000	9	30%
c. Rs.20,001-Rs.30,000	9	30%
d. >Rs.30,001	4	13.34%
NO. OF CHILDREN IN FAMILY		
1	4	13.33%
2	9	30%
3	8	26.66%
More than 3	9	30%

SOURCE OF DRINKING WATER		
MCD water supply	24	80%
Packed drinking water	1	3.33%
Ground water	2	6.66%
None of the above	3	10%
SANITATION FACILITY		
Own toilet	20	66.66%
Open defecation	0	0%
Shared latrine	10	33.33%
Both b and c	0	0%
WASTE DISPOSAL		
Dumping	2	6.66%
House to house collection	2	6.66%
Manual pit	0	0%
MCD van	26	86%
PREVIOUS INFORMATION		
Yes	18	60%
No	12	40%
IF YES, SOURCE OF PREVIOUS INFORMATION		
Books /magazines	1	5.55%
T.V., radio, newspaper	4	22.22%
Neighbours, family members, friends	8	44.44%
Health care worker	5	27.78%
VACCINATED WITH TYPHOID VACCINE		
Yes	2	6.66%
No	8	26.66%
No sure	20	66.66%

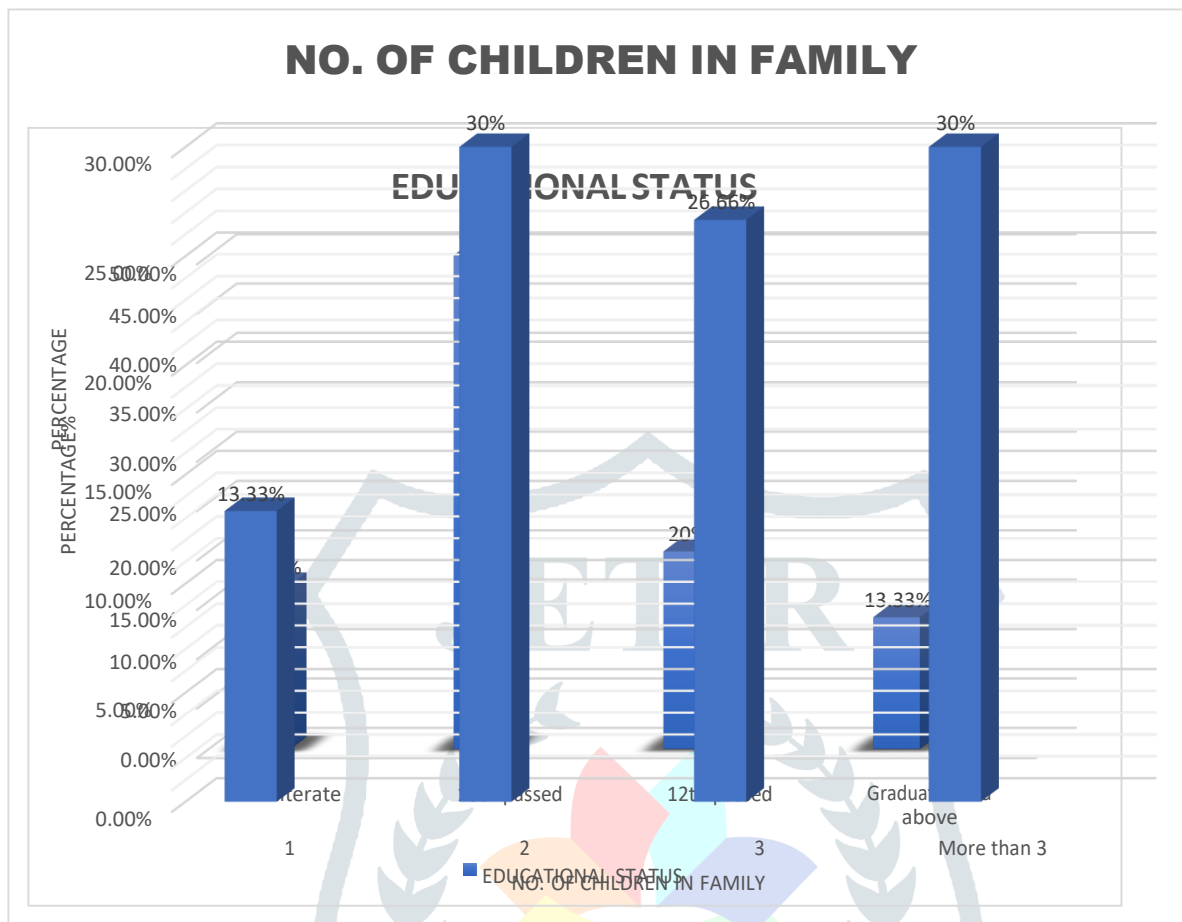
GRAPHICAL REPRESENTATION OF SOCIO DEMOGRAPHIC DATA



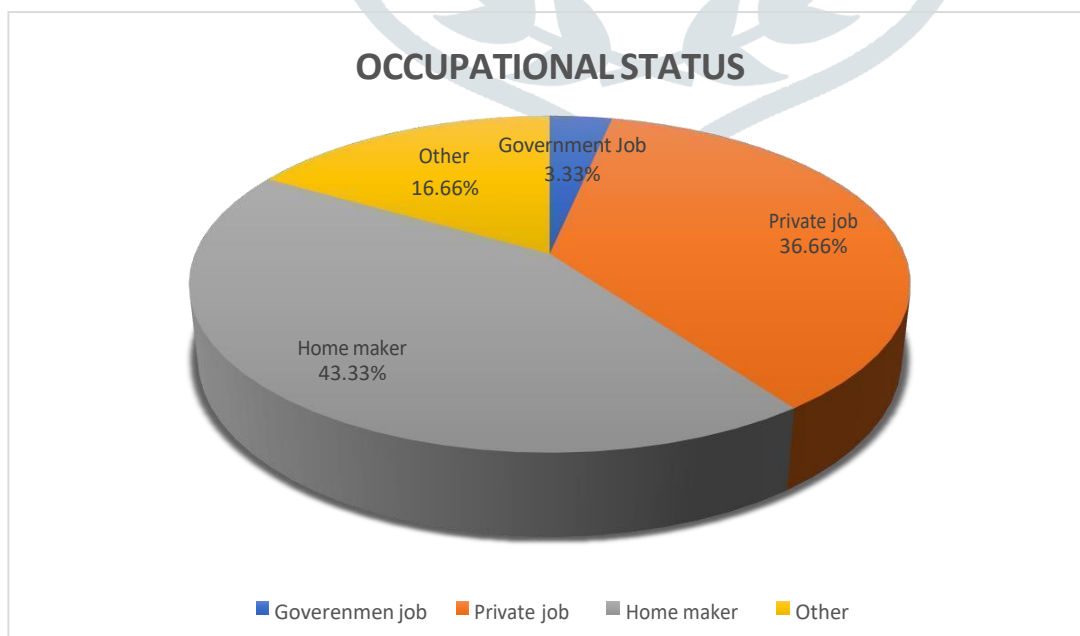
Majority of the adults live in joint family (70%) but few of them lives in nuclear family(20%) as well.



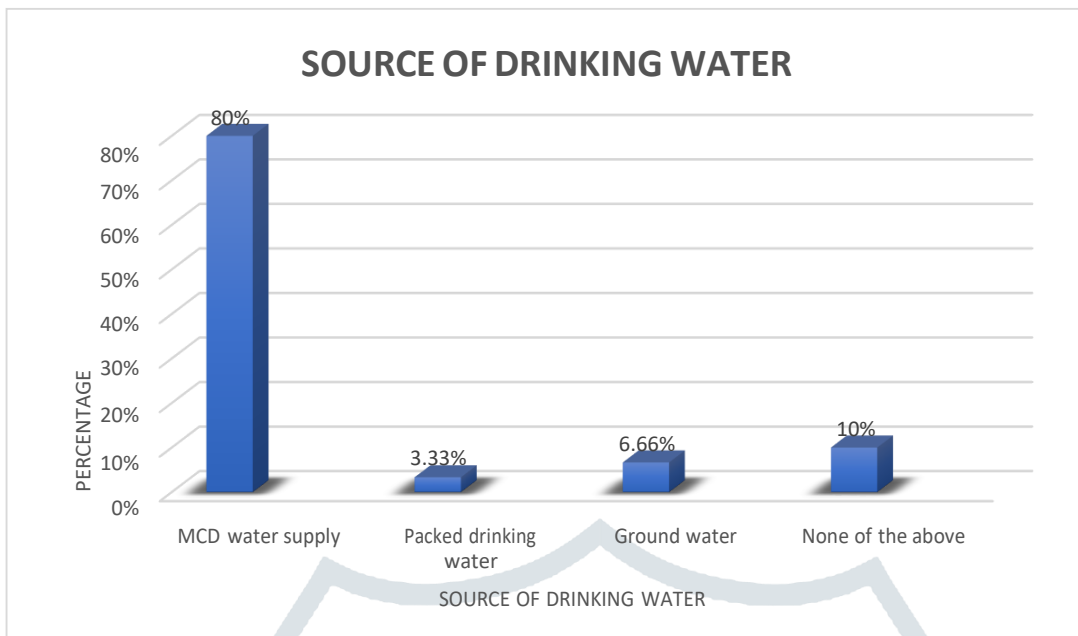
Majority of adults are Hindu (46.66%).



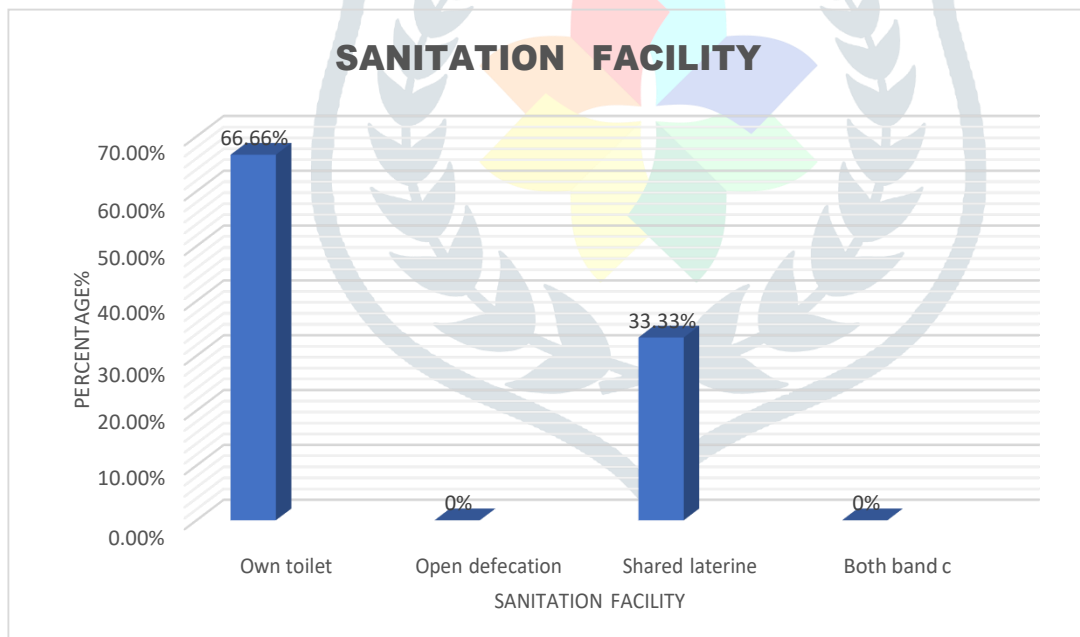
Majority of adults are 10th passed (50%).



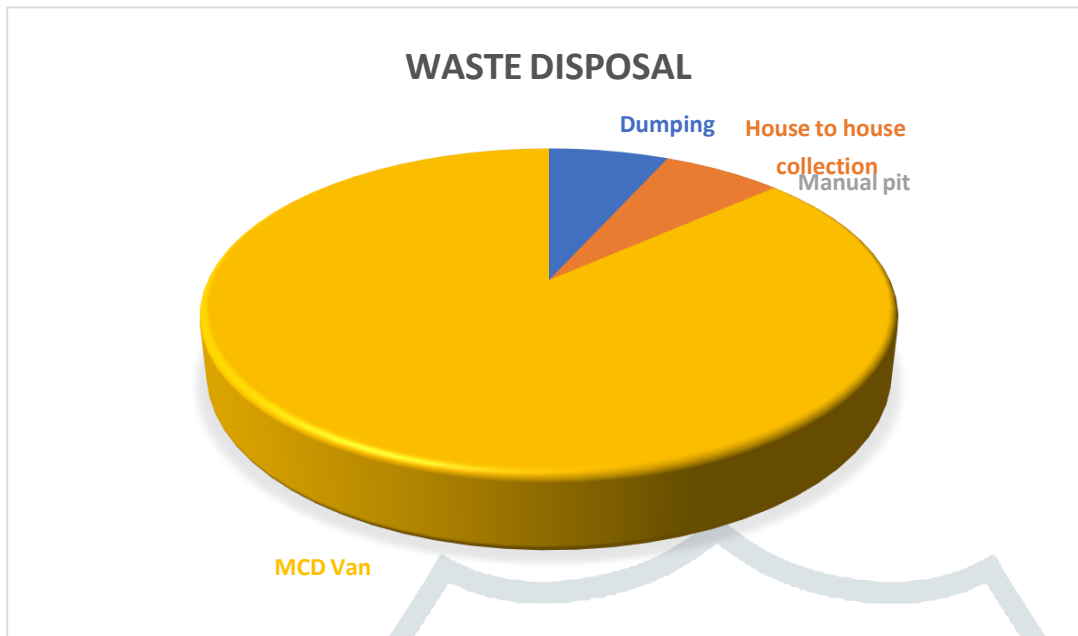
Majority of adults are homemaker (43.33%).



Most of the adults use MCD water supply (80%).



Most of the adults have their own toilet (66.66%).



Majority of adults use MCD van for waste disposal (86%).

SECTION 2

Section 2 deals with findings related to pre-test knowledge score, post-test knowledge score, and comparison of pre-test and post-test.

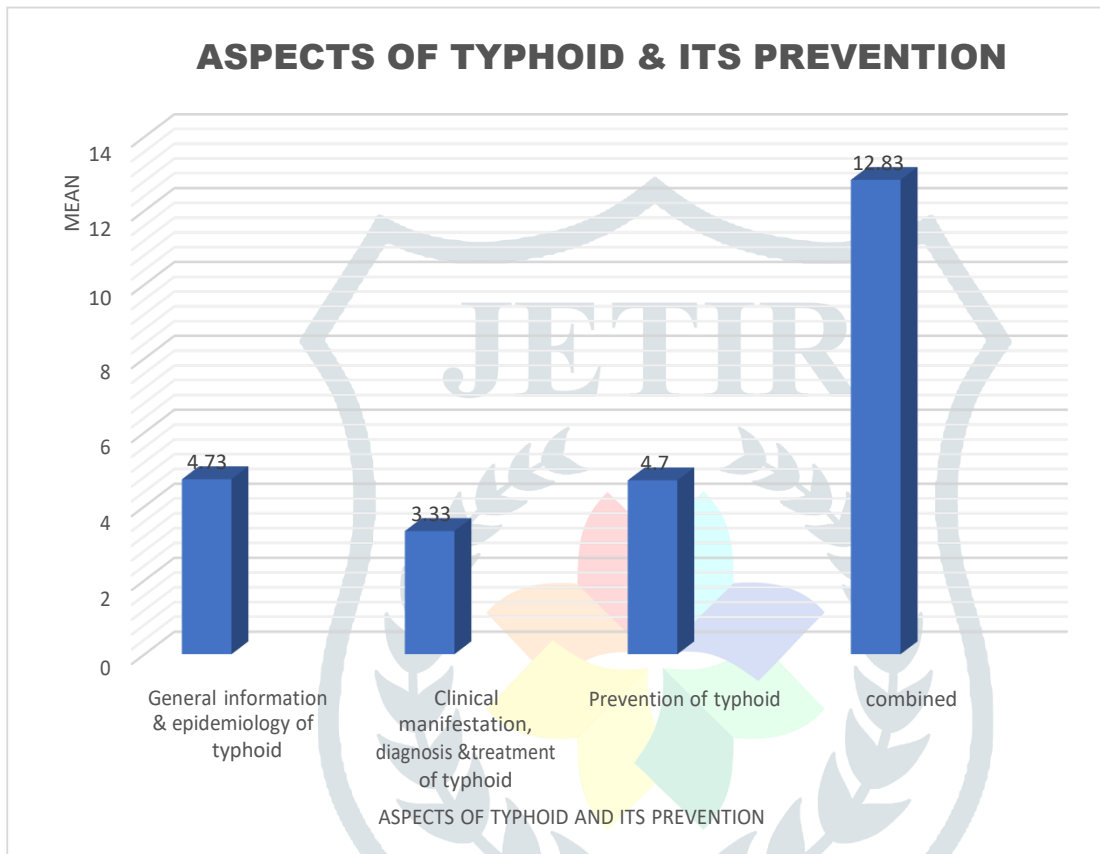
TABLE 2

ASPECT WISE PRE-TEST MEAN KNOWLEDGE SCORE OF RESPONDENTS ON TYPHOID N-30

ASPECTS OF TYPHOID AND ITS PREVENTION	STATEMENT	MAXIMUM SCORE	RESPONDENTS KNOWLEDGE		
			MEAN	MEAN %	SD
GENERAL INFORMATION AND EPIDEMIOLOGY OF TYPHOID	12	12	4.73	39.41%	2.11
CLINICAL MANIFESTATIONS, DIAGNOSIS AND TREATMENT OF TYPHOID	8	8	3.33	41.66%	0.94

PREVENTION OF TYPHOID	10	10	4.7	47%	1.59
COMBINED	30	30	12.83	42.77%	3.26

Above table shows pre-test knowledge score of respondents on various aspects of typhoid



Mean of knowledge score of adults regarding various aspects of typhoid is 12.83 and standard deviation is 3.26 before administering planned teaching programme.

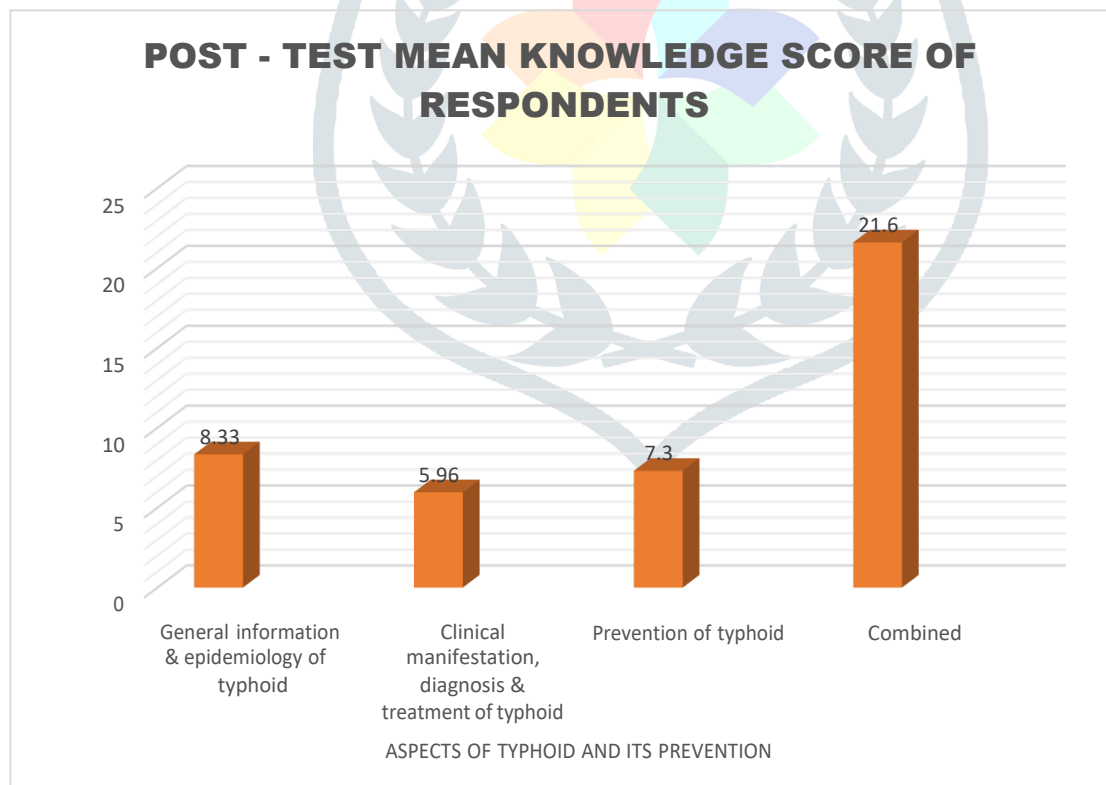
TABLE - 3

ASPECT WISE POST-TEST MEAN KNOWLEDGE SCORE OF RESPONDENTS OF TYPHOID

N-30

ASPECTS OF TYPHOID AND ITS PREVENTION	STATEMENT	MAXIMUM SCORE	RESPONDENTS KNOWLEDGE		
			MEAN	MEAN%	SD
GENERAL INFORMATION AND EPIDEMIOLOGY OF TYPHOID	12	12	8.33	69.44	1.39
CLINICAL MANIFESTATION, DIAGNOSIS AND TREATMENT OF TYPHOID	8	8	5.96	74.58	1.08
PREVENTION OF TYPHOID	10	10	7.3	73%	1.31
COMBINED	30	30	21.6	72%	2.76

Above table shows post-test knowledge score of respondents on various aspects of typhoid.



Mean of knowledge score of respondents regarding various aspects of typhoid is 21.6 and standard deviation is 2.76 after administering planned teaching programme.

TABLE 4**ASPECT WISE MEAN PRE-TEST AND POST-TEST KNOWLEDGE OF RESPONDENTS ON TYPHOID**

KNOWLEDGE ASPECT	RESPONDENTS KNOWLEDGE					PAIRED 't' TEST
	PRE-TEST		POST-TEST		ENHANCEMENT	
	MEAN	SD	MEAN	SD	MEAN	
GENERAL INFORMATION AND EPIDEMIOLOGY OF TYPHOID	4.73	2.11	8.33	1.39	3.6	
CLINICAL MANIFESTATION, DIAGNOSIS AND TREATMENT OF TYPHOID	3.33	0.94	5.96	1.08	2.63	
PREVENTION OF TYPHOID	4.7	1.59	7.3	1.31	2.6	
COMBINED	12.83	3.26	21.6	2.76	8.77	10.37

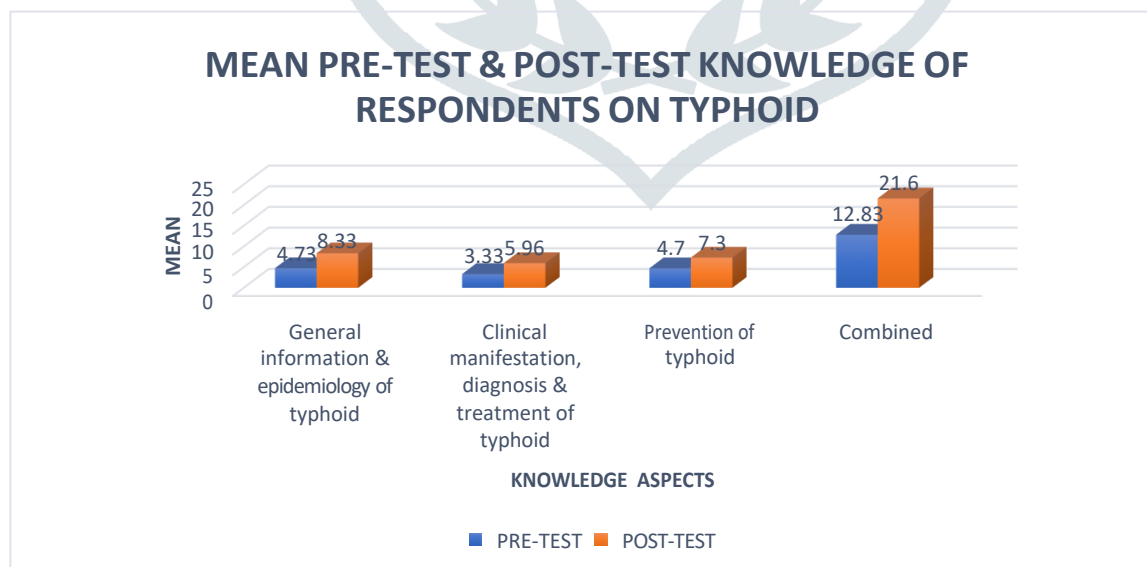
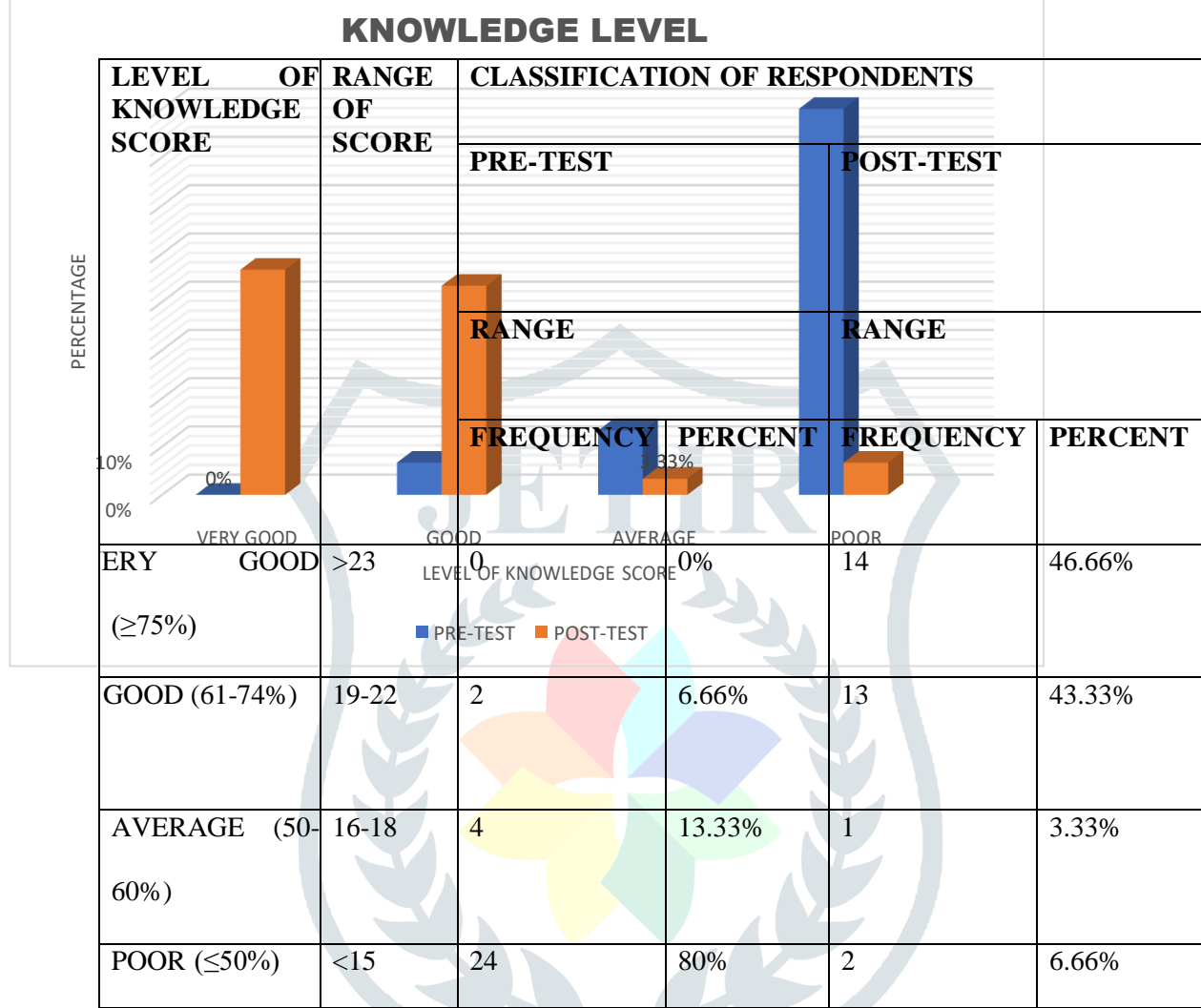


TABLE 5

CLASSIFICATION OF RESPONDENTS ON KNOWLEDGE LEVEL ON TYPHOID



CHAPTER 5

MAJOR FINDINGS, DISCUSSION, CONCLUSION, RECOMMENDATIONS, IMPLICATIONS AND LIMITATIONS

This chapter deals with major findings, conclusion and implication. The discussion in accordance with the objectives of the study and hypothesis.

THE STATEMENT OF THE PROBLEM WAS “A DESCRIPTIVE STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING TYPHOID AND ITS PREVENTION AMONG ADULTS RESIDING IN URBAN SLUM AREA, BAHADURGARH, HARYANA.”

DISCUSSION

OBJECTIVE 1: - To assess the level of knowledge of adults on typhoid and its prevention.

A result shows that out of 30 samples, had inadequate knowledge regarding prevention and control of typhoid.

OBJECTIVE 2: - To determine the effectiveness of structured teaching program among adults on typhoid fever and its prevention.

Analysis of the result showed that the overall pre-test mean was 12.83 with SD 3.26 and post-test mean 21.6 was with SD 2.76 so the knowledge scores of the adult has increased in post-test. Since the post-test value is more than pre-test. The structured teaching program was effective.

OBJECTIVE 3: - To find out the association between pre-test knowledge score and selected demographic variables.

There was no significant correlation found between the pre-test level of knowledge and certain demographic variables, including age, gender, religion, and family structure, according to the examination of the relationship between these variables and the pre-test level of knowledge. The research hypothesis H₂ is rejected and the null hypothesis is accepted since the obtained value is less than the table value at the significance level. However, because the acquired value is greater than the table value of level of significance, there was a significant association relationship between the adults' pre-test knowledge score and the variable such as educational status. Thus, the null hypothesis is rejected and the research hypothesis H₂ is accepted.

CONCLUSION

The results of the study show that individuals living in urban slums lack awareness about typhoid prevention and control.

Therefore, it is necessary to inform and educate adults about typhoid and how to prevent it.

IMPLICATIONS

The study has significant effects on general education, nursing research, nursing education, and nursing practices.

NURSING PRACTICE

The findings of the study imply that there is need for continued and intensified effort to ensure the typhoid prevention among adults in urban slum community.

NURSING EDUCATION

Typhoid is a serious illness that can be avoided with education, which is why it should be included in nursing curricula.

Nursing students must to be encouraged to individually examine and practice the fundamental measures of typhoid prevention and control.

Students studying nursing should urge individuals to pay greater attention to the prevention of typhoid disease.

All in-service nurses, including staff nurses, community health nurses, and public health nurses, should have access to continuing nursing education programs so they may inform, educate, and counsel patients as needed.

NURSING RESEARCH

According to the study's findings, the majority of adults did not know how to prevent typhoid in the pre-test. The researcher can investigate typhoid awareness and knowledge and prevention in more detail based on these findings.

There is a great deal of uncharted territory here. Even though there were only 30 participants in this study, it was discovered that the organized education program significantly improved adults' understanding and application of typhoid and its prevention.

A similar research study with a large sample size should be carried out by the nurse researcher. It will undoubtedly contribute to knowledge improvement and assist lessen typhoid-related difficulties.

To develop body of knowledge, to test the strategy to bring new finding in current education and quality education and quality care, nursing research is essential.

GENERAL EDUCATION:

The adults of urban slum community require education and awareness for typhoid and its prevention. Health care providers need to teach the community regarding typhoid and its prevention to help in reducing complications among adults due to typhoid.

LIMITATIONS: The limitation recognized in the study was: -

1. A similar study may be replicated on a larger scale.
2. A comparative study may be conducted between rural and urban areas.
3. The study can be replicated with a control group.

4. A study can be conducted to assess the long-term effect of individual structured teaching program in families and community.
5. A study can be conducted to assess the knowledge and practices regarding prevention and control of other water borne diseases among adults.
6. A study may be conducted to assess knowledge among people regarding various schemes launched by the government to improve typhoid cases.

SUMMARY:

The research hypothesis that was formulated is-

H1: The mean pre-test knowledge score of adults on typhoid and its prevention will differ significantly. H2: Adults' post-test knowledge scores on typhoid and its prevention will significantly correlate with a few demographic factors.

Pre-experimental research methodology was used for the investigation. The study was carried out in Haryana's Bahadurgarh. The method of convenience sampling was applied.

Thirty adults comprised the sample size. A systematic questionnaire with two sections was created as the data gathering method.

The structured questionnaire had two sections:

Section 1: Included questions about demographic information, including age, religious affiliation, educational background, family type, occupation, monthly household income, and number of children.

Section 2: Included items requesting information on typhoid, including signs and symptoms, management, and prevention.

Seven experts established the structured instruction program's content validity. The degree of significance was determined after the hypothesis was tested using the T-test, and the data was examined and interpreted in light of the objectives and study hypothesis.

The structured teaching program consists of following features:

1. Introduction
2. Definition
3. Etiology
4. Clinical features
5. Diagnostic evaluation
6. Complications
7. Management of typhoid
8. Prevention of typhoid.

MAJOR FINDINGS OF THE STUDY

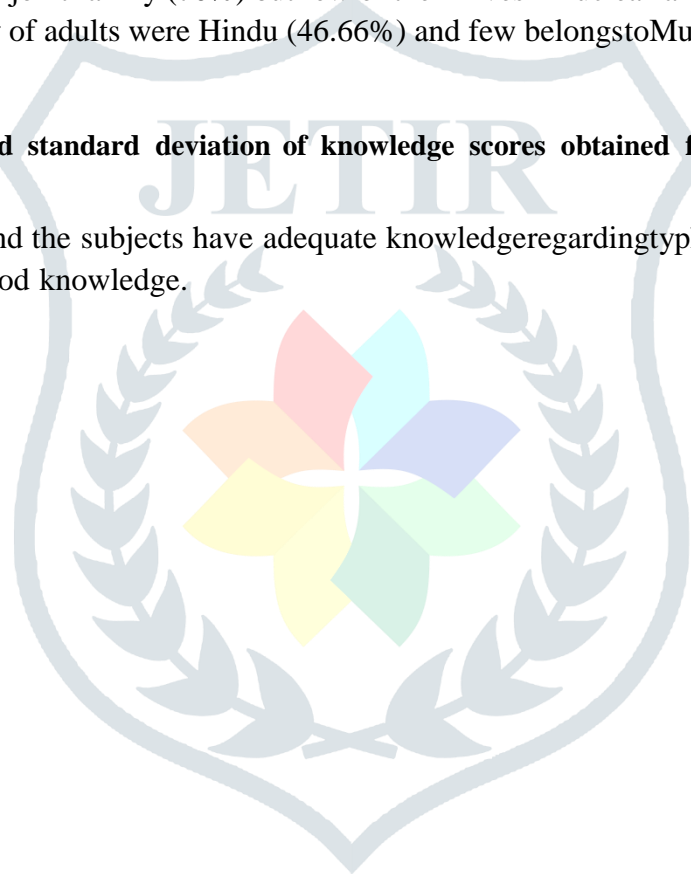
Findings related to demographic characteristics of adults in selected urban community-

1. Only 6.66% of adults were vaccinated with typhoid vaccine while 66.66% were not sure.

2. Only 60% of adults had previous information about typhoid and sources of information was Neighbours, family members and friends.
3. Most of the adults had their own toilet facility.
4. 86% of adults had manual pits for waste disposal.
5. Majority of adults were of age 18-26 years (26.6%).
6. Most of the adults had MCD water supply (80%).
7. Majority of adults have family income between Rs 10,001- Rs 20,000 (30%) and Rs20,001-Rs 30,000 (30%). Some of them earn below Rs 10,000 (26.66%) while some above Rs 30,001 (13.34%).
8. Majority of adults have two children (30%) some had three children (26.66%) and (30%) had more than three children.
9. Majority of females were homemaker (43.33%) and majority of males do job in private sector (36.66%).
10. Majority of adults were educated till metric (50%) while some were illiterate (16.66%).
11. Majority of the adults live in joint family (70%) but few of them live in nuclear family (20%) as well.
12. In term of Religion majority of adults were Hindu (46.66%) and few belong to Muslim range (43.33%).

Findings showing mean and standard deviation of knowledge scores obtained from adults of selected urban community-

1. The mean score was 6.02 and the subjects have adequate knowledge regarding typhoid and its prevention.
2. 46.66% adults have very good knowledge.





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20. Additional information on governance and public service delivery, can be found at <http://www.ifpri.cgiar.org/publication/decentralization-and-public-service-delivery-nigeria>

ANNEXURE-I**A LETTER FOR SEEKING EXPERT OPINION AND SUGGESTION FOR THE CONTENT VALIDATION OF RESEARCH PROJECT**

FROM GROUP A
 B. Sc. Nursing 4th year
 PDM College Of Nursing Bahadurgarh To:.....

SUBJECT: Requesting the expert opinion and suggestion for the content validity of research tool .

“A DESCRIPTIVE STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING TYPHOID AND ITS PREVENTION AMONG ADULTS RESIDING IN URBAN SLUM AREA, BAHADURGARH, HARYANA.”

Respected Sir/Madam

This is to inform you that we are final year student Bachelor of Science in Nursing in PDM Nursing College, Bahadurgarh, Haryana . We have selected the below mentioned topic for research project to be submitted to the PDM University, Bahadurgarh, Haryana as a partial fulfilment of university requirement for the award of Bachelor of Science Nursing Degree.

The topic of the research project is: **“A DESCRIPTIVE STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING TYPHOID AND ITS PREVENTION AMONG ADULTS RESIDING IN URBAN SLUM AREA, BAHADURGARH, HARYANA”**

In the connection, we have developed demographic profile of subjects, along with Pre-test and Post-test questionnaire assessing the knowledge of Typhoid and its Prevention. We request you to go through the tool and give your opinion for any modification and improvement needed. Your esteemed opinion and critical comments will provide and contribute immensely to the quality and content of my final research.

We will be grateful to you for your valuable remarks and suggestions. Thanking you, Yours faithfully,
 (Group A)

Neha Garg Varsha Devi Hansi Rathi Anjali Rathee Tushar
 Chirinjivi Gautam Sagar

ANNEXURE-II**ACCEPTION FORM FOR CONTENT VALIDATION CERTIFICATE**

TO WHOM IT MAY CONCERN

I hereby certify that I have validated the tool of Group A B.Sc. Nursing 4th year student who is undertaking “A Descriptive study to Assess The Effectiveness of STP regarding Typhoid and its prevention among adults residing in urban slum area, Bahadurgarh , Haryana”. I have gone through the tool and advised necessary suggestions.

Name of validator

Signature of validator

.....

.....

Designation.....

Date.....

ANNEXURE-III LIST OF EXPERTS

SR.NO.	NAME OF EXPERT	DESIGNATION
1	Mrs. Santosh Hooda	Professor and H.O.D M. Sc. MSN
2	Mrs. Santosh Gulia	Professor and Vice Principal M.Sc. MHN
3	Mr. Rahul	Nursing Tutor M.Sc. Community Health Nursing

ANNEXURE-IV

CERTIFICATION FOR VALIDATION

I am certifying that tool is valid for the conduction of the study “**A Descriptive study to assess the Effectiveness of STP regarding Typhoid and its Prevention Among Adults residing in urban slum area , Bahadurgarh , Haryana**”.

Signature of expert.....

Designation...Professor and H.O.D.....

Date.....

ANNEXURE - V

Ref No.

Date:



ENGLISH EDITING CERTIFICATE

This is certify that Group A (Neha Garg, Varsha Devi, Hansi Rathi , Anjali Rathee, Chiranjivi Gautam Shivam, Tushar, Sagar) B.Sc. Nursing 4th year students has made editonal changes successfully under my guidance in these entitled “**A Descriptive study to assess the Effectiveness of STP regarding Typhoid and its Prevention Among Adults residing**

in urban slum area , Bahadurgarh, Haryana”.

Name: Designation:Place:

Date:

ANNEXURE - VI

TOOLS FOR DATA COLLECTION

DESCRIPTION OF TOOLS

SECTION - A: - Socio demographic variable

SECTION –B:- Pre and post test questionnaire

Instruction

1. Read all question carefully.
2. Your information will we kept confidential and the data will we used for research purpose only.

SECTION-A

SOCIO- DEMOGRAPHIC VARIABLE

1 AGE

- a.18-26 ()
- b. 27-35 ()
- c. 36-44 ()
- d. 45-53 ()
- e. 54-62 ()

2.GENDER

- a. Male ()
- b. Female ()
- c. Other ()

3. TYPE OF FAMILY

- a. Joint ()
- b. Nuclear ()
- c. Extended ()

4. RELIGION

- a. Hindu ()
- b. Muslim ()
- c. Christian ()
- d. Other ()

5. EDUCATIONALSTATUS

- a.10th Passed ()
- b .Illiterate ()
- c.12th Passed ()
- d.Graduated and above ()

6. OCCUPATIONALSTATUS

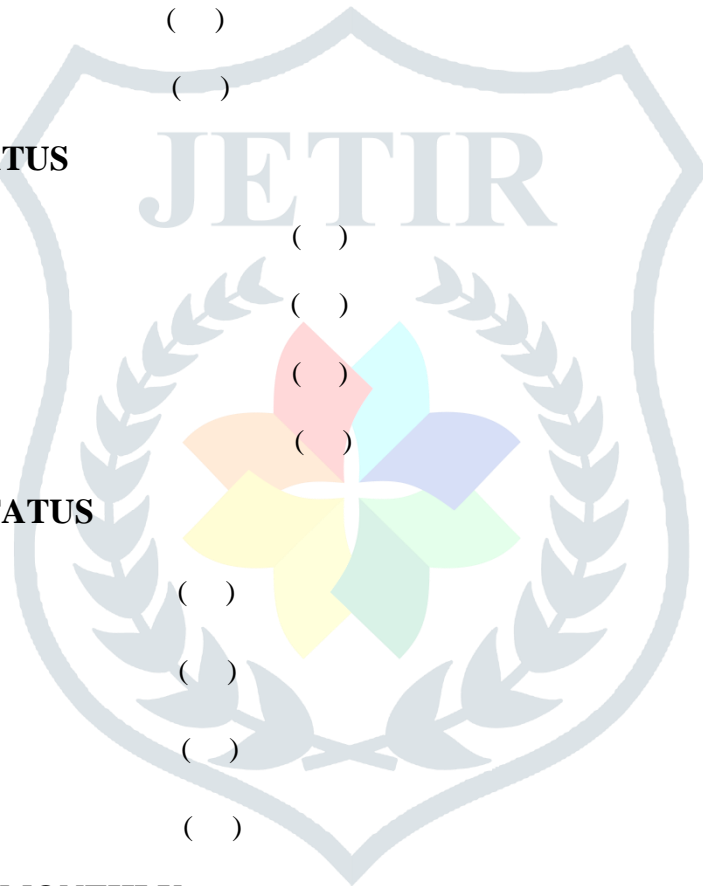
- a. Government job ()
- b. Private job ()
- c. Home maker ()
- d. Others ()

7.FAMILY INCOME(MONTHLY)

- a. < Rs.10,000 ()
- b.Rs.10,001-Rs.20,000 ()
- c \Rs.20,001-Rs.30,000 ()
- d. >Rs.30,001 ()

8.NO. OF CHILDREN INFAMILY

- a. 1 ()



- b. 2 ()
- c. 3 ()
- d. More than 3 ()

9.SOURCE OF DRINKINGWATER

- a..MCD water supply ()
- b. Packed drinking water ()
- c.Ground water ()
- d.None of the above ()

10 SANITATIONFACILITY

- a. Own toilet ()
- b. Open defecation ()
- c. Shared latrine ()
- d. Both b and c ()

11. WASTE DISPOSAL

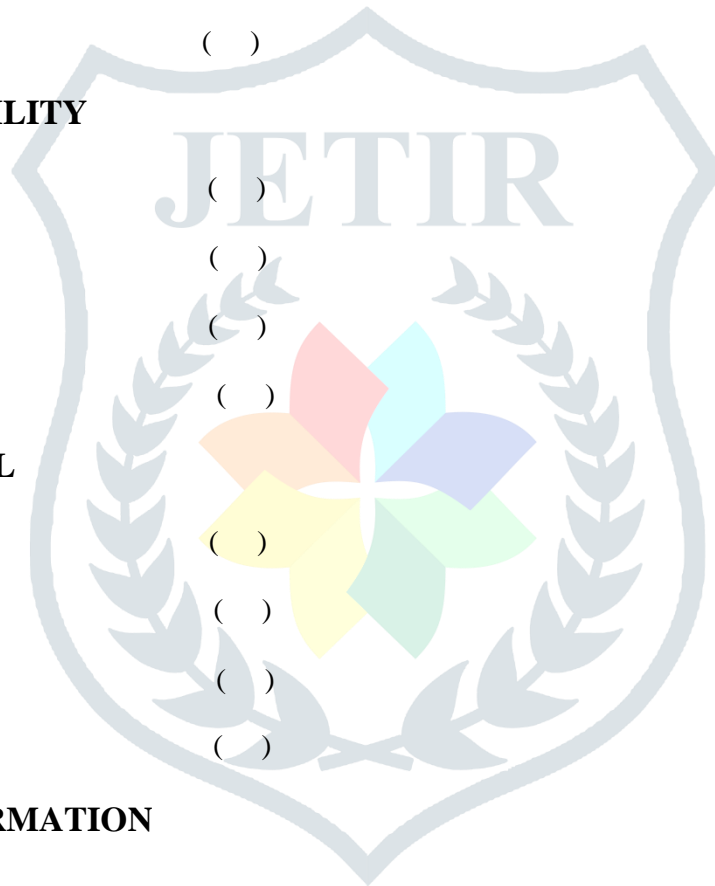
- a. Dumping ()
- b. House to housecollection ()
- c. Manual pit ()
- d. MCD van ()

12. PREVIOUS INFORMATION

- a. Yes ()
- b. No ()

13. IF YES, SOURCE OFPREVIOUS INFORMATION

- a. Books /magazines ()
- b. T.V., radio, newspaper ()
- c. Neighbours, familymembers, friends ()
- d. Health care worker ()



14. VACCINATED WITH TYPHOID VACCINE

- a. Yes ()
- b. No ()

ANNEXURE – VII ANSWER KEY

- 1. A
- 2. A
- 3. C
- 4. B
- 5. C
- 6. A
- 7. D
- 8. A
- 9. C
- 10. C
- 11. D
- 12. C
- 13. A
- 14. C
- 15. B
- 16. B
- 17. D
- 18. D
- 19. D
- 20. D
- 21. A
- 22. A
- 23. B
- 24. A
- 25. A



ANNEXURE VIII



COLLEGE OF NURSING

Ref.No:-

Date:-

From

Group A

B.Sc Nursing 4th year

PDM College of Nursing ,Bahadurgarh, Haryana

TO

The ward member

Johari Nagar, line par ward no.5

Bahadurgarh , Haryana

SUBJECT:- Seeking permission to conduct pilot study in Johari Nagar,line par , Bahadurgarh.

Respected Sir/Madam

We Group A ,B.Sc Nursing 4th year student of PDM college of Nursing Bahadurgarh , Haryana has planned to conduct a research pilot study at people living in slum area of line par , Bahadurgarh to fulfill the partial requirement of our B.Sc Nursing 4th year course.

Topic:-A Descriptive study to Assess the effectiveness of STP on knowledge of Typhoid and its prevention among adults residing in urban slum area, Bahadurgarh, Haryana.

Kindly permit us to conduct our research study.

We will be thankful to you for this act of kindness.

Yours faithfully

Group A

Neha Garg *Neha* Varsha *Varsha*Tushar *Tushar* Sagar *Sagar*Anjali Rathee *Anjali* Hansi Rathl *Hansi Rathl*Chirinjivi Gautam *Chirinjivi*

PRINCIPAL
DEAN
FACULTY OF NURSING
PDM COLLEGE OF NURSING
BAHADURGARH, SECTOR-3A
DELHI-136114 (Hr-124502)

20/05/24

Jyoti
JYOTI
Municipal Councillor
Ward No. 5, Bahadurgarh

A



COLLEGE OF NURSING

Ref.No:-

Date:-

From

Group A

B.Sc Nursing 4th year

PDM College of Nursing ,Bahadurgarh, Haryana

TO

The ward member

line par

ward no...6

Bahadurgarh , Haryana

SUBJECT:- Seeking permission to conduct main study in line par , Bahadurgarh.

Respected Sir/Madam

We Group A ,B.Sc Nursing 4th year student of PDM college of Nursing Bahadurgarh , Haryana has planned to conduct a research main study at people living in slum area of line par , Bahadurgarh to fulfill the partial requirement of our B.Sc Nursing 4th year course.

“A Descriptive study to assess the effectiveness of structured teaching program regarding typhoid and it’s preventions among adults residing in urban slum area Bahadurgarh, Haryana.

Kindly permit us to conduct our research study.

We will be thankful to you for this act of kindness.

Yours faithfully

Group A

Neha Garg *Neha* Varsha *Varsha* Tushar *Tushar* Sagar *Sagar*
 Anjali Rathee *Anjali* Hansi Rathi *Hansi Rathi* Chirinjivi Gautam *Chirinjivi*



Rajesh Tachar
 राजेश तचर
 नगर पार्क, वार्ड नं० 6,
 बहादुरगढ़ (हरियाणा)

ANNEXURE IX

CONSENT FORM

I am voluntary willing to participate in the study “**A Descriptive study to Assess the effectiveness of STP on knowledge of Typhoid and its prevention among adults residing in urban slum area, Bahadurgarh, Haryana**”. I will cooperate with the researcher in providing necessary information. I was explained that the information provided would be kept confidential and used only for above mentioned study purpose.

**Name of participant
participant**

Signature of

प से "शहरी स्लम क्षेत्र, बहादुरगढ़, हरियाणा में रहने वाले वयस्कों के बीच टाइफाइड के ज्ञान और इसकी रोकथाम पर एसटीपी की प्रभावशीलता का आकलन करने के लिए एक वर्णनात्मक अध्ययन" अध्ययन में भाग लेने के लिए तैयार हूँ। मैं आवश्यक जानकारी प्रदान करने में शोधकर्ता का सहयोग करूँगा। मुझे समझाया गया कि प्रदान की गई जानकारी गोपनीय रखी जाएगी और इसका उपयोग केवल उपर्युक्त अध्ययन उद्देश्य के लिए किया जाएगा।

**प्रतिभागी का नाम
प्रतिभागी के हस्ताक्षर**

ANNEXURE X

CODING SHEET FOR SCORING

S.NO	TOTAL SCORE(30)	CODE NO.
1.	Very good	>23
2.	Adequate knowledge	19-22
3.	Moderate knowledge	16-18
4.	Inadequate knowledge	<15

ANNEXURE XI

MASTER DATA SHEET OF SOCIO DEMOGRAPHIC VARIABLE

Subjects	Age	Gender	Type of family	Religion	Educational status	Occupational status	Family Income	No. of children in family	Source of drinking water	Sanitation facility	Waste disposal	Previous information	If yes, source of previous information	Vaccinated with typhoid vaccine
A1	1	2	2	1	1	2	2	3	1	1	1	2	-	3
A2	2	1	1	2	2	2	1	1	1	1	2	1	1	3
A3	1	1	1	1	3	1	3	1	1	3	4	1	3	2
A4	2	2	2	1	3	3	1	3	2	1	2	2	-	2
A5	1	2	1	2	1	2	2	1	1	1	4	2	-	1
A6	5	2	1	1	1	2	1	2	3	1	4	1	2	3
A7	1	1	1	2	2	3	1	3	1	1	4	1	3	3
A8	2	2	3	1	2	3	2	1	3	1	4	1	2	3
A9	1	1	1	3	2	2	2	3	1	3	4	1	3	1
A10	2	2	1	1	4	2	1	4	1	3	4	1	3	3
A11	2	2	3	3	1	2	2	4	1	3	4	2	-	3
A12	4	2	2	1	3	2	3	4	1	3	4	2	-	3
A13	1	2	1	1	4	4	1	2	1	1	4	2	-	3
A14	4	2	2	2	1	3	4	2	1	1	1	1	3	2
A15	4	2	1	1	2	4	4	2	1	1	4	1	3	1
A16	4	2	1	1	2	4	1	3	1	1	4	1	2	2
A17	1	2	1	2	2	3	4	3	1	1	4	1	2	3
A18	1	1	1	2	2	3	1	2	1	1	4	1	4	3
A19	3	2	1	2	3	2	2	2	1	1	4	1	4	2
A20	5	2	1	2	3	2	3	3	1	1	4	1	4	2

A21	5	1	1	2	3	2	2	3	1	3	4	1	4	2
-----	---	---	---	---	---	---	---	---	---	---	---	---	---	---

A22	2	1	2	1	2	3	2	4	1	3	4	1	3	3
A23	2	2	2	1	2	3	3	2	1	1	4	1	3	3
A24	3	2	1	1	2	3	2	2	1	1	4	1	4	3
A25	3	2	1	1	4	3	4	4	1	1	4	2	-	3
A26	3	2	1	2	2	4	3	4	1	1	4	2	-	3
A27	4	1	1	2	2	3	3	2	1	1	4	2	-	3
A28	4	2	1	4	2	3	3	4	4	3	4	2	-	3
A29	5	2	3	2	2	3	3	4	4	3	4	2	-	3
A30	5	2	1	2	4	4	3	4	4	3	4	2	-	3

ANNEXURE-XII

List of statistical formulas used

1. Mean
2. Median
3. Standard deviation
4. Frequency
5. Percentage
6. Paired 't' test
7. Unpaired 't' test
8. ANOVA
9. Split half odd even co-relation
10. Cronbach's alpha

ANNEXURE-XIII**Abbreviation**

S.NO	Short form	Full form
1	f	frequency
2	%	percentage
3	S	significant
4	NS	Non-significant
5	SD	Standard deviation
6	g	Grams
7	Df	Degree of Freedom
8	SPSS	Statistical package for the social science
9	ANOVA	Analysis of variance
10	N	Number of samples
11	>	Greater than
12	<	Less than
13	R	Reliability

ANNEXURE VIX

CODING SHEET

Socio- Demographic variables

S.No.	Variables	Code
1.	AGE a.18-26 b. 27-35 c. 36-44 d. 45-53 e. 54-62	
2.	GENDER d. Male e. Female f. Other	
3.	TYPE OF FAMILY d. Joint e. Nuclear f. Extended	2 3
4.	RELIGION e. Hindu f. Muslim g. Christian h. Other	1 2 3 4
5.	5. EDUCATIONAL STATUS	1

6.	a.10 th a. Illiterate	2
	b. 10 th Passed	3
	c 12 th Passed	4
7.	Graduated and above Passed	1
		2
		3
		4
8.	b. OCCUPATIONAL STATUS	
	a. Government job	1
	b. Private job	2
		3
9	c. Home maker	4
	d. Others	1
		2
		3
		4
10	7. FAMILY INCOME (MONTHLY)	
	a. < Rs.10,000	1
	b. Rs.10,001-Rs.20,000	2
		3
11	c. Rs.20,001-Rs.30,000	4
	d. > Rs.30,001	1
		2
		3
12	NO. OF CHILDREN IN FAMILY	4
	a. 1	1
	b. 2	2
13	c. 3	1
	d. More than 3	2
		3
		4
	SOURCE OF DRINKING WATER	
	a..MCD water supply	1
	b. Packed drinking water	2
	c. Ground water	3
	d. .None of the above	4

SANITATION FACILITY

Own toilet

1

Open defecation

2

c. Shared latrine

3

d. Both b and c

4**11.****WASTE DISPOSAL**

a. Dumping

1**2**

b. House to housecollection

3

c. Manual pit

4

d. MCD van

PREVIOUS INFORMATION

a. Yes

1

b. No

2**13.****IF YES, SOURCE OF PREVIOUS INFORMATION**

Books /magazines

1

T.V., radio, newspaper

2

Neighbours, familymembers, friends

3

d. Health care worker

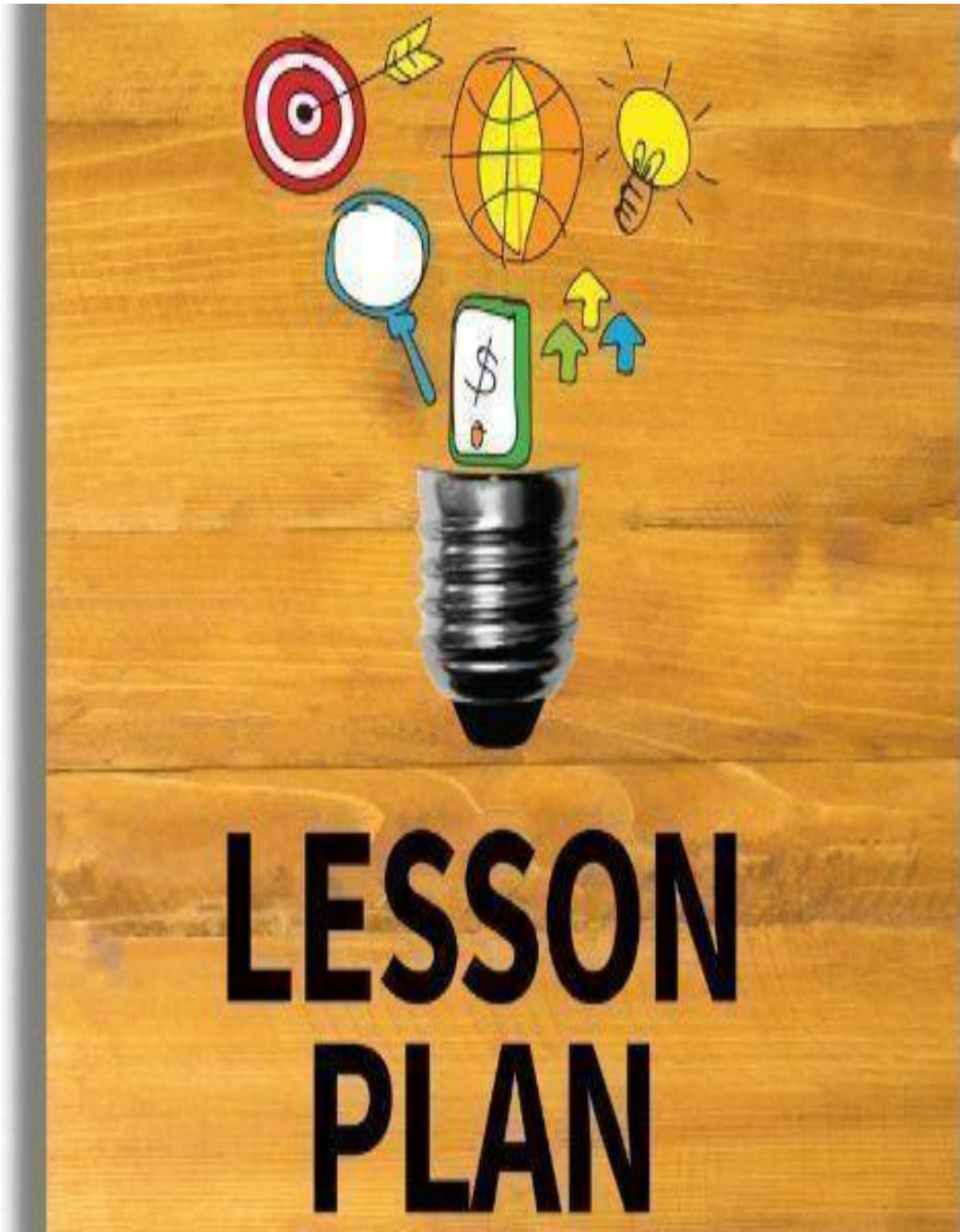
4**14. VACCINATED WITH TYPHOID VACCINE**

a. Yes

1

b. No

2



STRUCTURED TEACHING PROGRAMME ON TYPHOID AND ITS PREVENTIONS

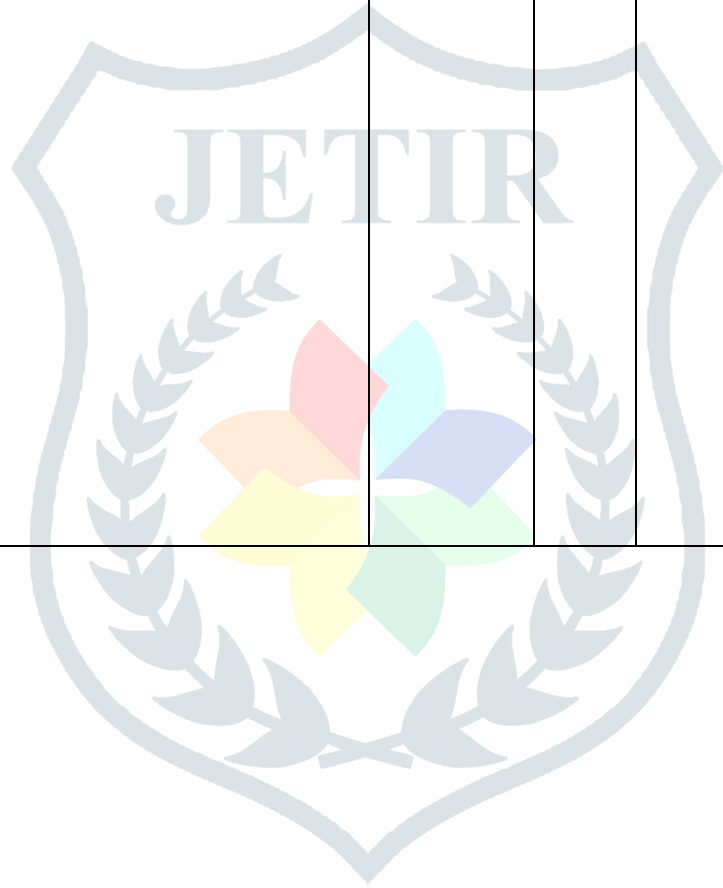
Topic	: Typhoid and its prevention
Duration	: 60Minutes
Group	: Adults
Size of the group	: 7 in number
Medium of instruction	: English and Hindi
Audio Visual aids	: Charts and Flash cards
General Objectives	: At the end of the session adults should develop adequate knowledgeregarding typhoid and its preventions.
Specific Objectives	: After the STP, the adults will be able to

- ❖ Introduction about Typhoid
- ❖ Define Typhoid
- ❖ Explain Etiology of Typhoid
- ❖ Explain about Clinical features of Typhoid
- ❖ Describe the Diagnostic Evaluation of Typhoid
- ❖ Describe the complications of Typhoid
- ❖ Discuss the management of Typhoid
- ❖ Explain about the preventive measures of Typhoid



S.NO.	TIME	SPECIFIC OBJECTIVE	CONTENT	TEACHING LEARNING ACTIVITY	A.VAIDS	EVALUTION
1	2min	Explain about self	Good morning, we are the students of B.Sc. Nursing final year in PDM University. Today we are here to discuss about Typhoid and its Prevention we hope you will listen carefully and will be able to give answers to our questions at the end.		Charts	
2	4min	Explain about Introduction of Typhoid fever	INTRODUCTION: Typhoid fever is a systemic infection caused by Salmonella enterica serotype Typhi (S.Typhi). The disease remains an important public health problem in developing countries. About 16 million cases of Typhoid fever and 6,00,000 deaths occur yearly worldwide and that more than 90% of this morbidity and mortality occurred in Asia	Lecture cum discussion method		What do you know about Typhoid?
3	6min	Explain about Definition of Typhoid	DEFINITION: Typhoid fever is an acute illness with fever caused by infection with the salmonella Typhi bacteria contact from contaminated water and food. Also called enteric fever, bilious fever and yellow jack. EPIDEMIOLOGY: Agent:-The causative agent is salmonella Typhi. Host factor:- Age- Lowest incidence is seen in those	Lecture cum discussion method		Define Typhoid?

			below2yrsandmaximuminbet ween5 -19 yrs. Gender-More cases seen in males.		
--	--	--	--	--	--



			6. Chills 7. Loss of appetite 8. Cough and sore throat			
--	--	--	--	--	--	--

4	4min	Explain about Causes of Typhoid	<p>Environment- it can occur throughout the year. Maximum cases occur in rainy season Incubation period-10 to 14 days MODE OF TRANSMISSION: Feco-oral Route Indirectly ingestion of contaminated water and food or through flies, contaminated ice cream and milk products</p> <p>CAUSES: Bacteria:- virulent bacterium that causes illness called salmonella Typhi. Feco-oral route:- Spread through contaminated food and water and occasionally through direct contact with someone who is infected Typhoid carriers:- these people called chronic carriers, shed the bacteria in their faeces and are capable of infecting others</p>	Lecture cum discussion method	Flash Cards	How does Typhoid spread?
5	7min	Explain about Clinical Features of Typhoid	<p>CLINICAL FEATURES: In first 5 to 7 days:- 1. Headache 2. Constipation 3. Remittent Fever (104 degree Fahrenheit) Step ladder fever 4. Brady cardia 5. Malaise</p>	Lecture cum discussion method	Charts and Flash Cards	What are the signs and symptoms of Typhoid?

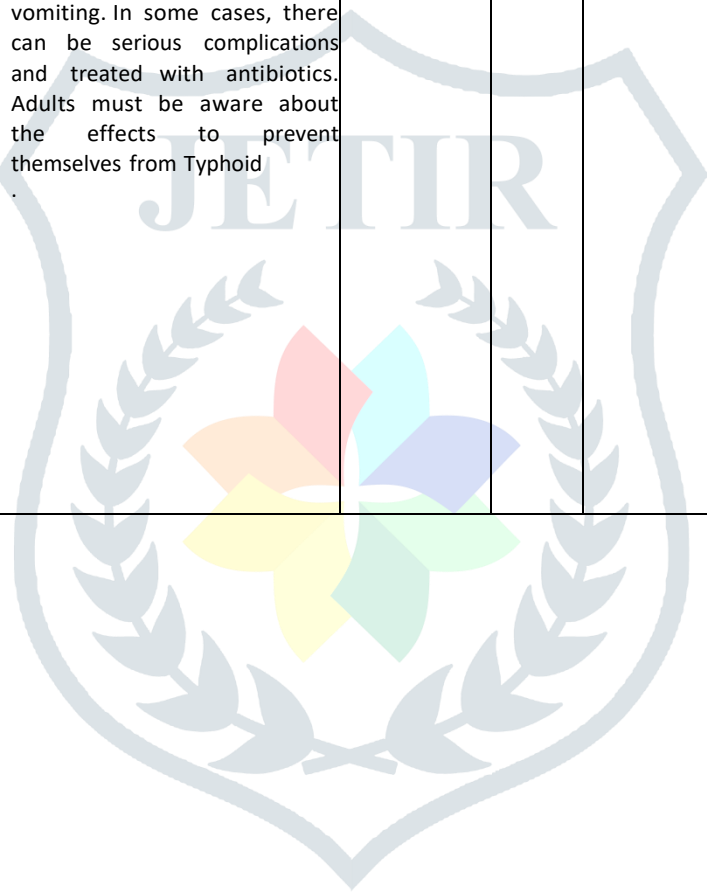
6	5min	Explain about Diagnostic Evaluation of Typhoid	<ul style="list-style-type: none"> ✓ In second week:- <ol style="list-style-type: none"> 1. Rose spots 2. Abdominal pain, cramps 3. Diarrhea 4. Vomiting 5. Body ache 6. Severe fatigue ✓ After two week of the Typhoid fever includes :- <ol style="list-style-type: none"> 1. Coma 2. Confusion 3. Agitation 4. Encephalopathy 5. Difficulty in paying attention 6. Hallucination (Seeing or Hearing things that are not real) <p>DIAGNOSTIC EVALUATION:-</p> <ul style="list-style-type: none"> ✓ History collection ✓ Physical examination <ol style="list-style-type: none"> 1. Red Rose spots 2. High grade fever ✓ Lab Investigations <ol style="list-style-type: none"> 1. Blood culture: A blood culture during the first week of the fever can show S. Typhi bacteria. 2. CBC (Complete blood count): ACBC will show a high number of white blood cells 3. Stool sample and culture : Stool culture may be positive for S. Typhi several days after ingestion of 	Lecture cum discussion method	Which tests should be carried out for Typhoid?
---	------	--	---	-------------------------------	--

			<p>bacteria.</p> <p>4. WIDAL Test: Test where by bacteria causing typhoid fever are mixed with</p>			
7	3min	Explain about Complication of Typhoid	<p>Serum containing specific antibodies obtain from an affected individual.</p> <p>COMPLICATIONS:</p> <ol style="list-style-type: none"> 1. Pneumonia 2. Meningitis 3. Myocarditis 4. Hepatitis 5. Shock, Hemorrhage 6. Perforation in small intestine <p>MANAGEMENT :</p> <p>Pharmacological management:</p> <p>-1. Ciprofloxacin:</p> <p>Class of drug- Quinolone antibiotics</p> <p>Uses - this medication is used to treat variety of bacterial infections.</p> <p>Route- Per oral</p> <p>Dosage- 500mg orally every 12 hours for 10 days (In Adults)</p> <p>Side Effects- Nausea, Vomiting, Dizziness, Blurred vision, Feeling of nervousness, Sleeping problems</p> <p>2. Rocephin (Ceftriaxone):</p> <p>Class of drug- Cephalosporin antibiotics</p> <p>Uses- It works by fighting bacteria in body</p> <p>Route- Intravenous (IV)</p> <p>Dosage- 75 to 80mg per kg once a day for 5 to 14 days</p> <p>IN ADULTS: 2gm IV every 24 hours</p> <p>Side effects- Mild diarrhea, Mild pain, Swelling, Nausea, Vomiting</p>	Lecture cum discussion method		<p>What are the complications of Typhoid?</p> <p>What is the management of Typhoid?</p>
8	10min	Explain Management of Typhoid	<p>Serum containing specific antibodies obtain from an affected individual.</p> <p>COMPLICATIONS:</p> <ol style="list-style-type: none"> 1. Pneumonia 2. Meningitis 3. Myocarditis 4. Hepatitis 5. Shock, Hemorrhage 6. Perforation in small intestine <p>MANAGEMENT :</p> <p>Pharmacological management:</p> <p>-1. Ciprofloxacin:</p> <p>Class of drug- Quinolone antibiotics</p> <p>Uses - this medication is used to treat variety of bacterial infections.</p> <p>Route- Per oral</p> <p>Dosage- 500mg orally every 12 hours for 10 days (In Adults)</p> <p>Side Effects- Nausea, Vomiting, Dizziness, Blurred vision, Feeling of nervousness, Sleeping problems</p> <p>2. Rocephin (Ceftriaxone):</p> <p>Class of drug- Cephalosporin antibiotics</p> <p>Uses- It works by fighting bacteria in body</p> <p>Route- Intravenous (IV)</p> <p>Dosage- 75 to 80mg per kg once a day for 5 to 14 days</p> <p>IN ADULTS: 2gm IV every 24 hours</p> <p>Side effects- Mild diarrhea, Mild pain, Swelling, Nausea, Vomiting</p>	Lecture cum discussion method		<p>What are the complications of Typhoid?</p> <p>What is the management of Typhoid?</p>

9.	15min	Explain Preventive measures for Typhoid	<p>Good oral hygiene Constipation may be relieved with laxatives if needed Drinking water to prevent dehydration IV fluid supplementation Dietary Management:- 1. Lots of fluids (juices, milk, soups) 2. Protein products (like egg, chicken, meat, paneer) should be provided. 3. Take short and frequent diets rather than three times heavy meals.</p> <p>What not to eat:</p> <ol style="list-style-type: none"> 1. Fibrous food like whole grain or whole dal, banana, papaya should be avoided. 2. Fried foods (samosa), extra spicy foods like achar, chutneys should be avoided <p>PREVENTIVE MEASURES:</p> <ol style="list-style-type: none"> 1. Isolation of the patient should be done till it becomes bacteriologically negative. 2. Improvement of basic Sanitation will be helpful in controlling Typhoid. 3. Boil water before drinking boiled water. 4. Avoid spicy food, eat soft bland diet. 5. Drink water or take liquid 	Lecture cum discussion method	Charts and Flash Cards	What preventive measures should be taken to prevent Typhoid?
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		<p>diet as much as you can.</p> <p>6. Avoid semi cooked food.</p> <p>7. Milk should be boiled before use.</p> <p>8. Improvement in food hygiene will help in the control of Typhoid.</p> <p>Provision of safe drinking water helps in Preventing the spread of disease.</p> <p>9. Wash vegetables and fruits before eating.</p> <p>11. Vaccines should be provided for prevention (inactivated killed vaccine given as a shot at 2 years).</p> <p>HEALTH EDUCATION :</p> <p>1. Wash hands before eating or preparing food and after using toilets.</p> <p>2. Clean and Wash food thoroughly.</p> <p>3. Boil water before drinking.</p> <p>4. Avoid fast food and spicy food.</p> <p>5. Oral and dental hygiene maintenance is important.</p> <p>6. Health education regarding mode of transmission and prevention should be given frequently.</p> <p>7. Promote adequate rest.</p> <p>9.</p>			
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10.	2min	Summa rize the topic Typhoid	<p>SUMMARY: By mean of STP the subjects learned about the Introduction , Epidemiology, Causes, Clinical features, Complications, Diagnostic Evaluation, Management and Prevention of Typhoid Fever.</p>	Lecture cum discussi- on method	Explain brieflyabout Typhoid?
11.	2min	End the topicw ith Conclu sion	<p>CONCLUSION: Typhoid is the life threatening infection causedby bacterium S.Typhi. The main symptoms are highfever, diarrhea and vomiting. In some cases, there can be serious complications and treated with antibiotics. Adults must be aware about the effects to prevent themselves from Typhoid</p>	Lecture cum discussi- on method	Concludethetopic?







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SECTION- A***Pre and Post Test Questionnaire***

1. Have you ever heard of typhoid fever? / क्या आप ने मोती झारा के बारे में सुना है?

- a. Yes/ हा
- b. No/ नह

2. Based on your knowledge, what is typhoid fever?/ आप के जानकारी के आधार पर , मोती झारा क्या होता है?

- a. An illness caused by bacteria due to poor personal hygiene and poor sanitation / एक बिमार जो उत्पन्न होत है,ज वाणु से और खुद और अपने आस - पास क सफाई से
- b. An illness which affects only children/ एक बिमार बसफ बिच्चे को प्रभावत करता है।
- c. Typhoid fever do not exist / मोत झारा नह होता है।
- d. It is when somebody has fever / ये जि होता है यबद बिखार है

3. What are the signs and symptoms associated to typhoid fever?/ कौन सा लक्षण मोती झारा से सम्बधत है ?

- a. There's no sign and symptom / कोई लक्षण नह होता है
- b. Anger, poverty, short height, hunger/ गुस्सा , गर बि , छोटा कद
- c. Fever, vomiting, malaise, diarrhea, headache/ बिखार ,उल्ट ,दस्त, सर मे दद
- d. Overweight, hallucination, loss of hair/ ज्यादा वजन, बिल का बगरना , माया

4. How do we get typhoid fever?/ हमे मोती झारा कै से होता है

- a. By talking with people/ लोगो से बिातच त करने से
- b. By ingesting/eating contaminated food and water/ दू बिात पान और खाना से
- c. By walking on the way/ सड़क पर से
- d. By staying in the hospital/ अस्पताल मे ठहरने से

5. What factors contribute to the spread of typhoid fever?/ कौन सा कारक मोती झार के फै लनेके थलए थजम्मेवार है

- a. Going to school/ स्कूल जाने से ()
- b. Smoking, alcohol / घुप्रपान, शरादि ()
- c. Poor hygiene and sanitation/ साफ - सफाई क कम ()
- d. There's no factor/ कोई कारक नह है ()

6. Can typhoid fever be prevented?/ क्या मोती झारा को रोका जा सकता है?

- a. Yes/ हा ()
- b. No/ नह है ()

7. If "Yes", how can it be done? / यदि कैसे हो,

- a. By sleeping in the night / रात में सोने से ()
- b. Avoid breathing / सास लेना दि करने से ()
- c. Playing under the rain / िर श में खेलने से ()
- d. Good personal hygiene and use of clean water / खुद क साफ-सफाई और साफ पान प ने से ()

8. Based on your understanding can typhoid disease be cured ?/ आप की समझ के आधार पर क्या मोती झार धिक हो सकता है?

- a. Yes/ हा ()
- b. No/ नह है ()

9. Typhoid fever is caused by ? / मोती झार होता है ?

- a. a virus/ एक बव्िणु से ()
- b. a worm/ एक कृ मृ से ()
- c. a bacteria / एक ज वाणु से ()
- d. a bite of flies/ मक्ख के काटने से ()

10. The place where S. Typhi hides in healthy carriers is most commonly? / वह स्थान जहाँ एस टाइफी स्वस्थ वाहको में सबसे अधिक धिपता है?

- a. The Liver / बजगर ()

c. Gall Bladder/ बपत्ताशय क थैल ()

d. The Fingers/ उगबल ()

11. Widal test is carried out to test ? / वडाल परीक्षण कसका परीक्षण करने के लिए किया जाता है?

a. Malaria / मलेरिया ()

b. Diabetes Mellitus/ मधुमेह ()

c. HIV/ AIDS/ एचआईव /एड्स ()

d. Typhoid fever/ मोत झारा ()

12. What is the major mode of transmission of Typhoid? / मोती झारा के सचरण का प्रमुख तरीका क्या है?

a. Animal bite/ जानवर का काटना ()

b. Direct person to person transmission/ प्रत्यक्ष व्यक्ति से व्यक्ति सचरण ()

c. Feco-oral route/ फे को-ओरल माग ()

d. Droplet nuclei/ विद नाबभक ()

13. What is the major source of infection of Typhoid? / मोती झारा के सक्रमण का प्रमुख स्रोत क्या है?

a. Food and water / भोजन और पान ()

b. Carrier / वाहक ()

c. Subclinical case / उपनैदाबनक मामला ()

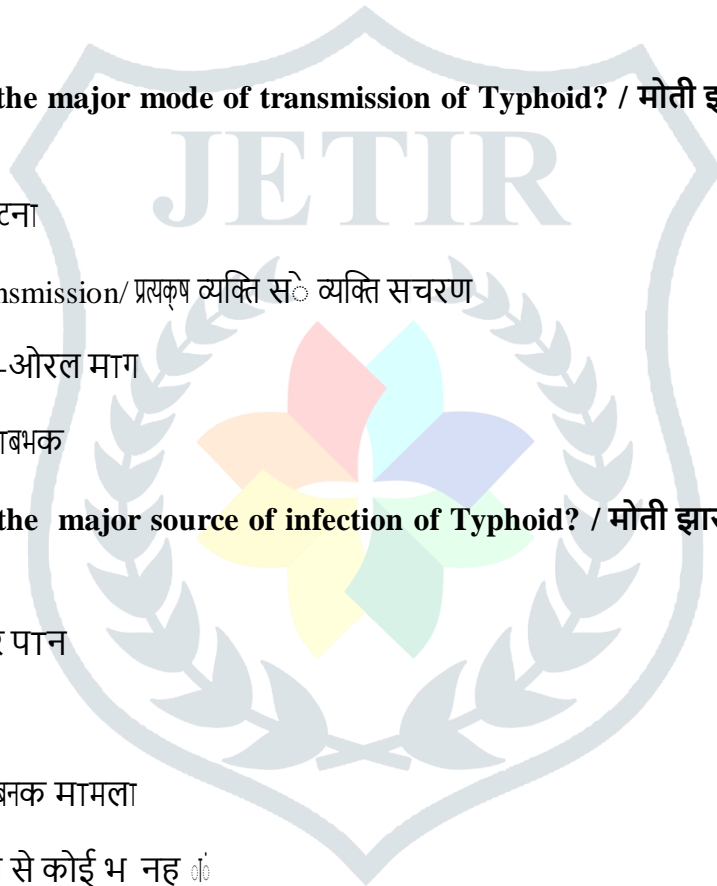
d. None of the above / इनमे से कोई भी नहीं ()

14. Which gender of population mostly at a risk of getting carrier state of Typhoid?/

जनसख्या के किस श्लग को मोती झारा की वाहक स्थित होने का खतरा अधिकतर होता है?

a. Male / पुरुष ()

b. Female / महिला ()



- c. Equal involvement of male and female / दोनों का समान मात्रा में ()
- d. None of the above/ इनमें से कोई नह ()

15. Period of communicability of Typhoid?/ मोती झारा के सचार की अवध ?

- a. One month prior to symptoms onset / लक्षण शुरू होने से एक मह ने पहले ()
- b. One week before and two week after appearance of symptoms/ लक्षण बदखने से एक सप्ताह पहले और दो सप्ताह बाद ()
- c. 10-14 days prior to symptom onset / लक्षण शुरू होने से 10-14 बदन पहले ()
- d. None of the above / इनमें से कोई नह ()

16. Incubation period of Typhoid is? / मोती झारा के लक्षण दिखाई देने की अवधी ?

- a. 18-72 hour / 18 – 72 घटे ()
- b. 10-14 days / 10 - 14 बदन ()
- c. 5-10days / 5- 10 बदन ()
- d. 15-21days / 15 – 21 बदन ()

17. In which age group highest incidence of Typhoid occur? / मोती झारा की सबसे अधिक घटना किस आयु वग में होती है ?

- a. Under 5 children / 5 से कम उमर के बच्चे ()
- b. 10-15 year age group / 10-15 वरि आयु समूह ()
- c. 45-60 year age group /45- 60 वरि आयु समूह ()
- d. 15-19year age group / 15- 19 वरि आयु समूह ()

18. What is the name of vaccine against Typhoid? / मोती झारा के खरुद्ध टीके का क्या नाम है?

- a. TYPHIM vi vaccine / टाइबफम vi ट का ()
- b. MMR vaccine / एमएमआर ट के ()
- c. Typhoral vaccine / टाइफोरल वैक्स न ()
- d. Both a and c / ए और स दोनों ()

19. Which measures take for prevention of Typhoid? / मोती झारा की रोकथाम के लिए कौन से उपाय करें?

- a. Drinking clean water / साफ पान पना
- b. Maintain personal hygiene / व्यक्तिगत स्वच्छता िनाए रखें
- c. Safe food / सुरबक्षत भोजन
- d. All of the above / ऊपर के सभ

20. Complication of Typhoid Fever? / मोती झारा की जटलता ?

- a. Relapse / पतन
- b. Perforation of bowel / आत्र का बछद्र
- c. Blood in stool / मल में खून
- d. All of the above / ऊपर के सभ

21. Is Typhoid a communicable disease? / क्या मोती झारा एक सक्रामक रोग है?

- a. Yes / हा
- b. No / नह

22. Is Hand hygiene a precautionary measure? / क्या हाथ की स्वच्छता एक एहतयाती उपाय है?

- a. Yes / हा
- b. No / नह

23. Is there any previous cases in your family or friends? / क्या आपके पररवार या िोस्ो में पहले कोई मामला है?

- a. Yes / हा
- b. No / नह

24. Which kind of food is provided in Typhoid? / मोती झारा में कस प्रकार का भोजन िया जाता है?

- a. Cooked and boiled vegetables / पक और उबाले हुए सब्जियाँ ()
- b. Spicy food / मसालेदार भोजन ()
- c. High fatty diet / उच्च वसायुक्त आहार ()
- d. Junk food / जंक फूड ()

25. Which prevention should be taken in Typhoid ? मोतीझारा में कौन सी सावधानी बरतनी चाहिए ?

- a. Drink purified water/ शुद्ध पान बपर्यें / ()
- b. Follow spiritual beliefs / आध्यात्मिक मान्यताओं का पालन करें ()
- c. None of the above / इनमें से कोई भी नहीं ()
- d. All of the above / ऊपर के सभी ()

26. What is first sign and symptoms seen in typhoid fever/ मोतीझारा में पहले दिखने वाले लक्षण क्या है?

- A. Headache/बसर्द ()
- b. Fever/ठंडूखार ()
- c. Stomach pain/ पेट में दर्द ()
- d. weakness and fatigue/कमजोर और थकान ()

27. Is it also a symptom to have red marks on the chest /क्या सीने पर लाल निशाने होना भी एक लक्षण है/

- a. Yes/हां ()
- b. No/ नहीं ()

28. Priority drug treatment for typhoid is? टाइफाइड के लिए प्राथमिकता वाली दवा उपचार है?

- a. penicillin/पेनिसिलिन ()
- b. Azithromycin/ऐज़िथ्रोमाइसिन ()
- c. Amoxicillin/ एमोक्सिसिलिन () d. Doxycycline/डॉक्स साइक्लिन ()

29. What are the side effects of priority drug azithromycin?/ प्राथमिकता विवा एंज़िथ्रोमाइसिन के िरभाव क्या हैं?

- a. Allergic reaction/ एलर्जिक प्रतिक्रिया () b. Vomiting/ उल्ट करना ()
- c. Pain in joints/जोड़ों में दर्द ()
- d. Both (a) & (b)/ ए ए व बि दोनो ()

30. What are the symptoms of Typhoid fever?/ टाइफाइड बुखार के लक्षण क्या हैं?

- a. Headache / बस दर्द ()
- b. Fever/ िरुखार ()
- c. Pain in stomach/जोड़ों में दर्द ()
- d. All of the above/इनमें से सभी ()

