"A descriptive study to assess the knowledge and practice of people regarding prevention of dengue fever in residing area of Chaubepur, Kanpur Nagar"

1Dr Mohd Shoeb PT, 2Dr Nidhi Shukla PT

1Asst professor, 2Asst professor

1Saaii college of medical science and technology,

2Rama University

ABSTRACT

Dengue is a mosquito –borne viral infection. The infection causes flu like illness, and occasionally develops into a potentially lethal complication called severe dengue. The global incidence of dengue has grown dramatically in recent decades. About half of the world's population is now at risk. Dengue is found in tropical and sub-tropical climates worldwide, mostly in the urban and semi-urban aereas.Therfore,we choose the study Titled "A *descriptive* study to assess the knowledge and practice of people regarding prevention of dengue fever in residing areas of choubeypur, Kanpur Nagar'' was undertaken. A quantitative research approach and descriptive research design was used the research setting was selected areas of Chaubeypur,Kanpur .UP Total 40 people were selected with purposive sampling technique. Written consent was taken from the people who were selected as sample. Self –structured knowledge questionnaire containing 30 questions and checklist containing 9 questions was used to evaluate the knowledge and practice of people regarding prevention of dengue fever. Result depicted that mean knowledge and practice score of people was 19.98 ± 4.22 and 4.9 ± 1.77. This mean score was satistically non-significant at $p<0.005$ level, Hence, it was inferred that people have average knowledge and favourable practice of people regarding prevention of dengue fever.The study needs to be replicated in the large sample to validate and genralize its findings.

Keywords: People, Knowledge, Practice, Viral fever, Dengue, Prevention.

I – INTRODUCTION

Dengue is a mosquito-borne viral disease that has rapidly spread in all regions of the world. Dengue virus is transmitted by female mosquitoes mainly of the species Aedes aegypti and, to a lesser extent, Aedes Albopictus. These mosquitoes are also vectors of chikungunya, yellow fever and Zika viruses. Severe dengue was first recognized in the 1950s during dengue epidemics in the Philippines and Thailand. Today, severe dengue affects most Asian and Latin American countries and has become a leading cause of hospitalization and death among children and adults in these regions. Dengue is caused by a virus of the Flaviviridae family and there are four distinct, but closely related, serotypes of the virus that cause dengue (DENV-1, DENV-2, DENV-3 and DENV-4). Recovery from infection is believed to provide lifelong immunity against that serotype. The number of dengue cases reported to WHO increased over 8 fold over the last two decades, from 505,430 cases in 2000, to over 2.4 million in 2010, and 4.2 million in 2019. In 2019, dengue continues to affect several countries, with reports of increases in the numbers of cases in Bangladesh, Brazil, Cook Islands, Ecuador, India, Indonesia, Maldives, Mauritania, Mayotte (Fr), Nepal, Singapore, Sri Lanka, Sudan, Thailand, Timor-Leste and Yemen. The largest number of dengue cases ever reported globally was in 2019. The virus is transmitted to humans through the bites of infected female mosquitoes, primarily the Aedes aegypti mosquito. Other species within the Aedes genus can also act as vectors, but their contribution is secondary to Aedes aegypti. After feeding on an DENV-infected person, the virus replicates in the mosquito midgut, before it disseminates to secondary tissues, including the salivary glands. The time it takes from ingesting the virus to actual transmission to a new host is termed the extrinsic incubation period (EIP). The EIP takes about 8-12 days when the ambient temperature is between 25-28°C. The possibility of maternal transmission (from a pregnant mother to her baby), While vertical transmission rates appear low, with the risk of vertical transmission seemingly linked to the timing of the dengue infection during the pregnancy. Symptoms usually last for 2–7 days, after an incubation period of 4–10 days after the bite from and infected mosquito . The World Health Organization classifies dengue into 2 major categories: dengue (with / without warning signs) and severe dengue. Dengue should be suspected when a high fever (40°C/104°F) is accompanied by 2 of the following symptoms during the febrile phase: severe headache, pain behind the eyes, muscle and joint pains, nausea, vomiting, swollen glands and rash. A patient enters what is called the critical phase normally about 3-7 days after illness onset. It is at this time, when the fever is dropping (below 38°C/100°F) in the patient, that warning signs associated with severe dengue can manifest. Severe dengue is a potentially fatal complication, due to plasma leaking, fluid accumulation, respiratory distress, severe bleeding, or organ impairment. Warning signs that doctors should look for include: severe abdominal, pain persistent, vomiting, rapid breathing, bleeding gums, fatigue, restlessness and blood in vomit. If patients manifest these symptoms during the critical phase, close

observation for the next 24–48 hours is essential so that proper medical care can be provided, to avoid complications and risk of death. Several methods can be used for diagnosis of DENV infection. The virus may be isolated from the blood during the first few days of infection. (1) Various reverse transcriptase–polymerase chain reaction (RT–PCR) methods are available. In general, RT–PCR assays are sensitive, but they require specialized equipment and technical training for staff implementing the test. The virus may also be detected by testing for a virus-produced protein, called NS1. There are commercially- produced rapid diagnostic tests available for this, because it takes only ~20 mins to determine the result and the test does not require specialized laboratory techniques or equipment. (2) Serological methods, such as enzyme-linked immunesorbent assays (ELISA), may confirm the presence of a recent or past infection, with the detection of IgM and IgG anti-dengue antibodies. IgM antibodies are detectable ~1 week after infection and are highest at 2 to 4 weeks after the onset of illness. They remain detectable for about 3 months. The presence of IgM is indicative of a recent DENV infection. IgG antibody levels take longer to develop than IgM, but IgG remain in the body for years. The presence of IgG is indicative of a past infection. There is no specific treatment for dengue fever. Fever reducers and pain killers can be taken to control the symptoms of muscle aches and pains, and fever. The best options to treat these symptoms are acetaminophen or paracetamol. NSAIDs (non-steroidal anti-inflammatory drugs), such as Ibuprofen and aspirin should be avoided. These anti-inflammatory drugs act by thinning the blood, and in a disease with risk of hemorrhage, blood thinners may exacerbate the prognosis. For severe dengue, medical care by physicians and nurses experienced with the effects and progression of the disease can save lives – decreasing mortality rates from more than 20% to less than 1%. Maintenance of the patient's body fluid volume is critical to severe dengue care. Patients with dengue should seek medical advice upon the appearance of warning signs. The first dengue vaccine, Dengvaxia® (CYD-TDV) developed by Sanofi Pasteur was licensed in December 2015 and has now been approved by regulatory authorities in ~20 countries. In November 2017, the results of an additional analysis to retrospectively determine serostatus at the time of vaccination were released. The analysis showed that the subset of trial participants who were inferred to be seronegative at time of first vaccination had a higher risk of more severe dengue and hospitalizations from dengue compared to unvaccinated participants. As such, use of the vaccine is targeted for persons living in endemic areas, ranging from 9-45 years of age, who have had at least 1 documented dengue virus infection previously. If you know you have dengue, avoid getting further mosquito bites during the first week of illness. Virus may be circulating in the blood during this time, and therefore you may transmit the virus to new uninfected mosquitoes, which may in turn infect other people. The proximity of mosquito vector breeding sites to human habitation is a significant risk factor for dengue as well as for other diseases that Aedes mosquito transmits. At present, the main method to control or prevent the transmission of dengue virus is to combat the mosquito vectors. This is achieved through the prevention of mosquito breeding: Preventing   mosquitoes from accessing egg-laying habitats by environmental management and

modification, disposing of solid waste properly and removing artificial man-made habitats that can hold water, Covering, emptying and cleaning of domestic water storage containers on a weekly basis, Applying appropriate insecticides to water storage outdoor containers, Personal protection from mosquito bites, Using of personal household protection measures, such as window screens, repellents, insecticide treated materials, coils and vaporizers. These measures must be observed during the day both inside and outside of the home (e.g.: at work/school) because the primary mosquito vectors bites throughout the day, Wearing clothing that minimizes skin exposure to mosquitoes is advised. Educating the community on the risks of mosquito-borne diseases. Emergency vector control measures such as applying insecticides as space spraying during outbreaks may be used by health authorities. Monitoring and surveillance of vector abundance and species composition should be carried out to determine effectiveness of control interventions.[1] **S Bhatt (2014)**[2] Seroprevalence of Dengue Viral Infection in Patients Attending to a Tertiary Care Hospital in Kanchipuram, As dengue related mortality and morbidity is more common, this hospital based seroprevalence study was conducted to assess the magnitude of dengue virus infection and to know, whether there is an overall increase in the dengue infection prevalence in Kanchipuram. Total of 1,170 (606 males and 564 females) serum samples from suspected dengue fever cases were obtained for three years from January 2010 to December 2012. The overall seropositivity was 32.1% [298 (25.5%) were positive out of 1170 for dengue specific IgM and 78 (6.7%) were positive for dengue specific IgG or both IgM and IgG]. There was a gradual increase observed in dengue seropositivity over the study period of three years. **MS Pedrosa (2017)**[3] Oral manifestations related to dengue fever: a systematic review of the literature. The focus on oral manifestations of dengue fever (DF) is not common in the scientific literature and the patient affected can present signs and symptoms that may not be noticed by dental professionals. This systematic review article was conducted to identify and discuss the oral manifestations related to DF. The electronic databases Pub Med, Latin American and Caribbean Literature in Sciences (LILACS), Web of Science and Scopus were searched from November to December 2016 by two authors, simultaneously, using the search terms 'dengue and oral manifestation' combined. We included complete original articles, clinical trials and clinical case reports published in Portuguese, Spanish and English. No limits were applied to the year of publication. Review articles and those with no health outcomes were removed. A limited number of studies aimed to investigate the oral manifestations of DF (N = 25). However, several manifestations were identified in the oral cavity of patients diagnosed with DF such as acute gingival and palate bleeding, dryness of the mouth, taste changes, and erythematous plaque and vesicles on the tongue and palate. Osteonecrosis of jaw associated with DF was also reported. In conclusion, oral manifestations may represent a relevant contributory factor to identify DF disease among patients undergoing dental procedures in general practise. **Christopher Thiam Seong Lim (2019)**[4] Dengue is a viral infection transmitted by an aedes aegypti mosquito bite that poses a major threat to public health worldwide. While acute kidney injury secondary to dengue infection is a potentially lethal complication, it remains one of the

least studied complications of dengue fever. The underlying mechanism of dengue-associated acute kidney injury is complex because it involves multiple pathways that could independently lead to its occurrence. Therefore, the cornerstone of dengue-associated acute kidney injury management should involve prompt recognition and identification of the at-risk population and administration of appropriate supportive treatment in a timely manner with the aim of preventing both renal and non-renal morbidity and mortality.

II - METHODOLOGY

Research methodology indicates the generalized pattern of organizing the procedure for gathering valid and reliable data for investigation. It includes the strategies to be used to collect and analyze the data to accomplish the research objective and to test research hypothesis. Methodology of research indicates the general pattern of organizing the procedures of answering the research question.

Methodology deals with:
- Research approach
- Research design
- Research setting
- Target population
- Sample and sampling technique
- Inclusion and exclusion criteria
- Selection and development of tool
- Description of tool
- Validity of tool
- Reliability of tool
- Data collection procedure
- Ethical consideration
- Plan for data analysis

Research approach : Polite and Hungler (1999)[24] research approach refers to the researcher's overall plan for obtaining answers to the research questions or for testing the research hypothesis. It is the basic strategy that the researcher adopts to develop information that is accurate and interpretable. Non experimental research approach was appropriate for the present study as it aimed to assess the knowledge and practice of people regarding prevention of dengue fever in residing area of chaubepur, Kanpur Nagar.

Research design : Burns N. Groove SK (2002)[25] "Research is a blue print for conducting a study that maximizes control over factors that could interfere with the validity of the findings." The research design is the plan for obtaining answer to the question being studied. A descriptive research design was considered appropriate for the study to assess the knowledge and practice of answer to the research assumption.

Research setting : The present study was conducted at residing areas of Chaubepur, Kanpur Nagar. The rationale in selecting this setting for the study was the researcher's familiar with the setting, geographical proximity, and easy availability of samples.

Target population : Population is a complete set of persons or subjects that possess some common characteristics that are of interest to researcher. The target population for the present study was people of residing areas, i.e. residing areas of Chaubepur, Kanpur Nagar.

Sample and sampling technique : Polit and Hungler (1999)[26] Refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. The samples were people in residing area of Chaubepur, Kanpur Nagar. The samples consist of 40 peoples who fulfilled the criteria for sample selection and who were available at the community areas at the time of data collection.

Sample size : In the present study 40 people in residing area of Chaubepur, Kanpur Nagar.

Sampling technique : Purposive sampling technique (non- probability sampling) was used for the selection of samples.

Inclusion criteria and exclusion criteria : Inclusion criteria include Peoples who were available during time of data collection were taken as sample. Exclusion criteria exclude Peoples who were not willing to participate in the study.

Variable : According to Polit DF, Hungler BP (2004)[27] A variables implies something that varies, and variables may be any quality of a group or situation that takes on different values.

Demographic variables : Age, sex, education, type of family, type of house, income, occupation, and marital status source of information.

Research variables : Knowledge and practice of people regarding prevention of dengue fever in residing area of chaubepur Kanpur Nagar.

Selection and development of tool : Tool is an instrument used by the researcher to collect data. The instrument selected in a research should be far as possible be vehicle that would be best obtaining data for drawing conclusion, which are pertinent to data. The self-structured questionnaire and checklist schedule was used for descriptive study, where investigator was interested in establishing rapport and obtaining facts and study.

Description of tool : To accomplish the objectives of the study, a self-structured questionnaire and checklist was developed to assess the knowledge and practice of people regarding prevention of dengue fever in residing area of chaubepur Kanpur Nagar. The questionnaire tool was consisted of three parts:

Part A: - (Demographic variables) : Demographic variables like age, sex, qualification, income, type of family, type of house, marital status, occupation, source of information.

Part B: - (self-structured questionnaire) to assess knowledge : The self-structured questionnaire related to assess the knowledge regarding prevention of dengue fever. It consists of 39 questions related to knowledge and prevention of dengue fever. It includes questions related to what is the meaning of dengue, causes, vector of transmission and mode of transmission, sign and symptoms and prevention of dengue fever. To determine the knowledge of people every correct answer was given '1' score and every wrong answer given score '0'. Based on that, it was calculated for 39 items. The maximum possible score of the tool was 39 and minimum score was 0. A total score of 0-13 indicates below average knowledge, 14-26 indicates average knowledge and 27- 39 indicates good knowledge.

Part C: - (checklist) to assess practice : The checklist related practice of people regarding prevention of dengue fever. It consists of 9 questions related to practice of people regarding prevention of dengue fever. It includes questions related to common practices of people regarding prevention of dengue fever. To determine the practice of people every correct answer was given '1' score and every wrong answer was given score '0'. Based on that, it was calculated for 9 items. The maximum possible score of the tool was 9 and minimum score   was 0. A total score of 0-4 indicated unfavorable practice and 5-9 indicates favorable practice.

Validity of tool : Burns N, Groove SK (2003)[28], state that validity is the extent to which the method of measurement includes all the major elements relevant to the construct being measured. To measure the content validity of the tool, the questionnaire schedule and checklist was given to the 3 experts from the field of Medical Surgical Nursing. The experts were chosen based on their clinical expertise, experience, qualification, and interest in the problem area. The validity of tool was confirmed by expert's opinion regarding relevance of items. Modifications were made in demographic variables i.e. Part-1 and self-structured questionnaire i.e. Part II, and checklist i.e. Part III. The modification in the tool. i.e. Hindi version was made as per valuable suggestions given by experts from the field of Medical Surgical Nursing.

Reliability of tool : Polit DF, Hungler BP (2004)[29], state that reliability of an instrument is the degree of consistency with which it measures the attributes it is supposed to be measuring. Reliability of the tool was estimated by split half method which included computing Pearson's coefficient of correlation and thereafter applying Spearman Brown prophecy formula, which was found be r' 0.84. Hence the tools were found

reliable.

Data collection procedure : Burns N, Groove SK (2003)[30], state that data collection is the identification of subjects and precise, systematic gathering of information (data) relevant to the research purpose or the specific objectives, questions or the assumptions of a study. The data was collected from the community areas of chaubepur, Kanpur Nagar. The present was conducted on 10/10/19 to 30/10/19. Prior to study formal permission was obtained from Pradhan of community areas of chaubepur, Kanpur Nagar. Purpose of the study was explained to the subjects. The subjects were assured about anonymity and confidentiality of the information provided by the man informed consent was taken from those who were willing to participate in the study. 40 people were enrolled from community by the purposive sampling technique. Tool was given to the people and data for the study collected. Time taken by each sample for interview schedule approximately 20 minutes.

Plan of data analysis : The analysis and interpretation of data was done according to objectives by using descriptive and inferential statistics.

1.   **Descriptive statistics :** Frequency and percentage distribution were used to describe demographic variables of people . Mean, Mean percentage and Standard deviation were used to assess the knowledge and practice of people regarding prevention of dengue fever in residing area of chaubepur.

2.   **Inferential statistics:** Chi-square test was used to find the association of existing knowledge and practice of people regarding prevention of dengue fever with their selected demographic variables.
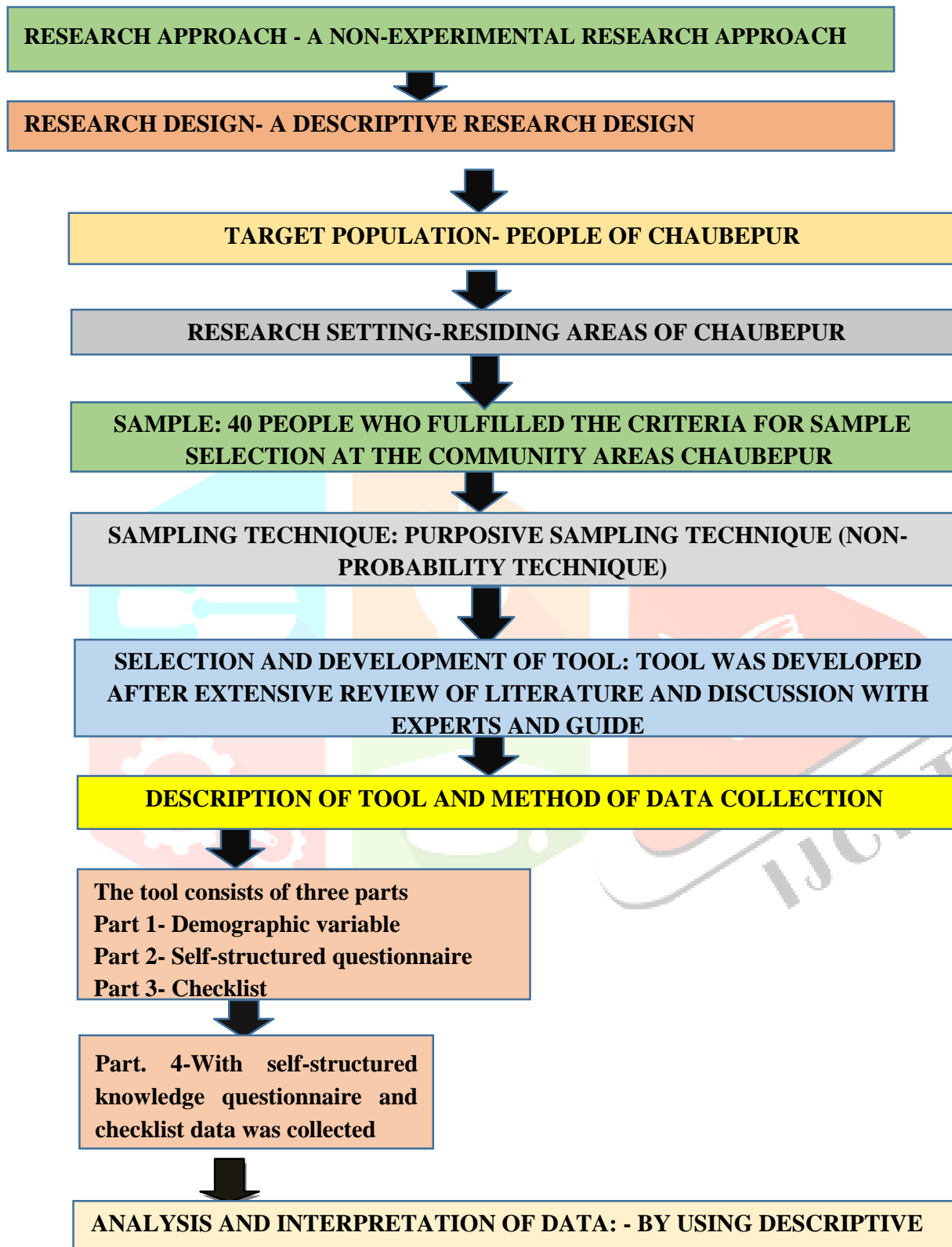
RESEARCH APPROACH - A NON-EXPERIMENTAL RESEARCH APPROACH

RESEARCH DESIGN- A DESCRIPTIVE RESEARCH DESIGN

TARGET POPULATION- PEOPLE OF CHAUBEPUR

RESEARCH SETTING-RESIDING AREAS OF CHAUBEPUR

SAMPLE: 40 PEOPLE WHO FULFILLED THE CRITERIA FOR SAMPLE SELECTION AT THE COMMUNITY AREAS CHAUBEPUR

SAMPLING TECHNIQUE: PURPOSIVE SAMPLING TECHNIQUE (NON-PROBABILITY TECHNIQUE)

SELECTION AND DEVELOPMENT OF TOOL: TOOL WAS DEVELOPED AFTER EXTENSIVE REVIEW OF LITERATURE AND DISCUSSION WITH EXPERTS AND GUIDE

DESCRIPTION OF TOOL AND METHOD OF DATA COLLECTION

The tool consists of three parts
Part 1- Demographic variable
Part 2- Self-structured questionnaire
Part 3- Checklist

Part. 4-With self-structured knowledge questionnaire and checklist data was collected

ANALYSIS AND INTERPRETATION OF DATA: - BY USING DESCRIPTIVE

Fig. 1. Methodology Flowchart

IV - PROCEDURE AND ANALYSIS

For the Interpreatation of data used Data was analysed using descriptive and inferential statistics by using Nvivo for qualitative and SPSS,(Statistical Package for the Social Science)Stata and R for statistical analysis of quantitative data. This chapter deals with analysis and interpretation of the data collected to assess knowledge and practice of people regarding prevention of dengue fever in residing area of chaubeypur, Kanpur Nagar. Total 40 people were selected using purposive sampling. The study was carried out in the month October 2019. **Polit DF, Hungler BP (2004)[31] "**state that Data analysis is the systematic organization and sythesis of research hypothesis using those data". **Polit DF, Hungler BP (2004)[32]** "state the data analysis is the technique used to reduce organize and give meaning to data". The other purpose of data analysis, regardless of the type of data one has, is to impose some order on a large body of information so that the data can be synthesized, intrepeted and communicated.

ORGANIZATION AND PRESENTATION OF DATA : The data was organized and presented under the following headings. **Section I -** Socio- demographic variables **Section II**- Findings related to knowledge scores **Section III**- Findings related to practice scores. **Section IV**- Findings related to association between knowledge and practices with selected demographic variables.

<u>**SECTION I: DESCRIPTION OF DEMOGRAPHIC VARIABLES**</u>

Table 1 : Frequency and percentage distribution of people according demographic variables.

SR.NO.	DEMOGRAPHIC VARIABLES	PEOPLE	
		Frequency (f)	Percentage (%)
1.	AGE(in years)		
	a. 19-24yr	15	37.5
	b. 25-30yr	7	17.5
	c. 31-45yr	14	35.0
	d. 46 and above	4	10.0
2.	SEX		
	a. Male	16	40
	b. Female	24	60
3.	MERITAL STATUS		
	a. Married	29	72.5
	b. Unmarried	11	27.5

Table1 : that the were shows people

4.	TYPE OF FAMILY		
	a. Nuclear	11	27.5
	b. Joint	29	72.5
5.	TYPE OF HOUSE		
	a. Pakka	21	52.5
	b. Kaccha	**7**	17.5
	c. Semi-pakka	12	30.0
6.	INCOME		
	a. >5000	15	37.5
	b. 5001-10000	14	35.0
	c. 10001-15000	7	17.5
	d. <15000	4	10.0
7.	EDUCATION		
	a. Matric	4	10.0
	b. Senior-secondary	10	25.0
	c. Graduate	17	42.5
	d. Illitrate	9	22.5
8.	OCCUPATION		
	a. Farmer	7	17.5
	b. Private job	13	32.5
	c. House-wife	13	32.5
	d. Student	7	17.5
9.	SOURCE OF INFORMATION		
	a. Radio	3	7.5
	b. Television	6	15.0
	c. News paper	11	27.5
	d. Health worker	10	25.0
	e. No-one	10	25.0

distributed into various categories according to age , sex, marital status, educational status, income, type of family, type of house, occupation, and source of information regarding prevention of dengue fever. According to age, 37.5% (15) people were in age group 19-24 years, 17.5%(7) people were in age group 25-30 years, 35.0%(14) people were in age group 31-45, and 10%(4) people were in age group more than 45 years. According to gender,40%(16) people were males and 60%(24) people were females.

According to marital status, 72.5%(29) people were married and 27.5%(11) people were unmarried. According to type of family, 27.5%(11) people belong to nuclear family and 72.5%(29) people belong to joint family. According to type of house, 52.5%(21)) people lives in pakka house, 17.5%(7)) people lives in kaccha house and 30%(12) people lives in semi- pakka house. According to family income, 37.5%(15) family income was >5000, 35.0%(14) family income was 5001-10000, 17.5%(7) family income was 10001-15000, 10.0%(4) family income was more than 15000. According to education, 10%(4) people were matric passed, 25%(10) people were senior secondary passed, 42.5%(17) people were graduate, 22.5%(9) people were illitrate. According to occupation, 17.5%(7) people were farmer, 32.5%(13) people were private job , 32.5%(13)people were house-wife, 17.5%(7) people were student. According to source of information, 7.5%(3) people by radio, 15%(6) people by television , 27.5%(11)people by newspaper, 25%(10) people by health-worker and 25%(10) people by no-one.
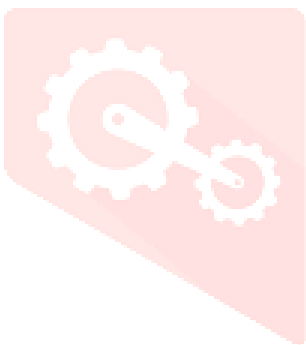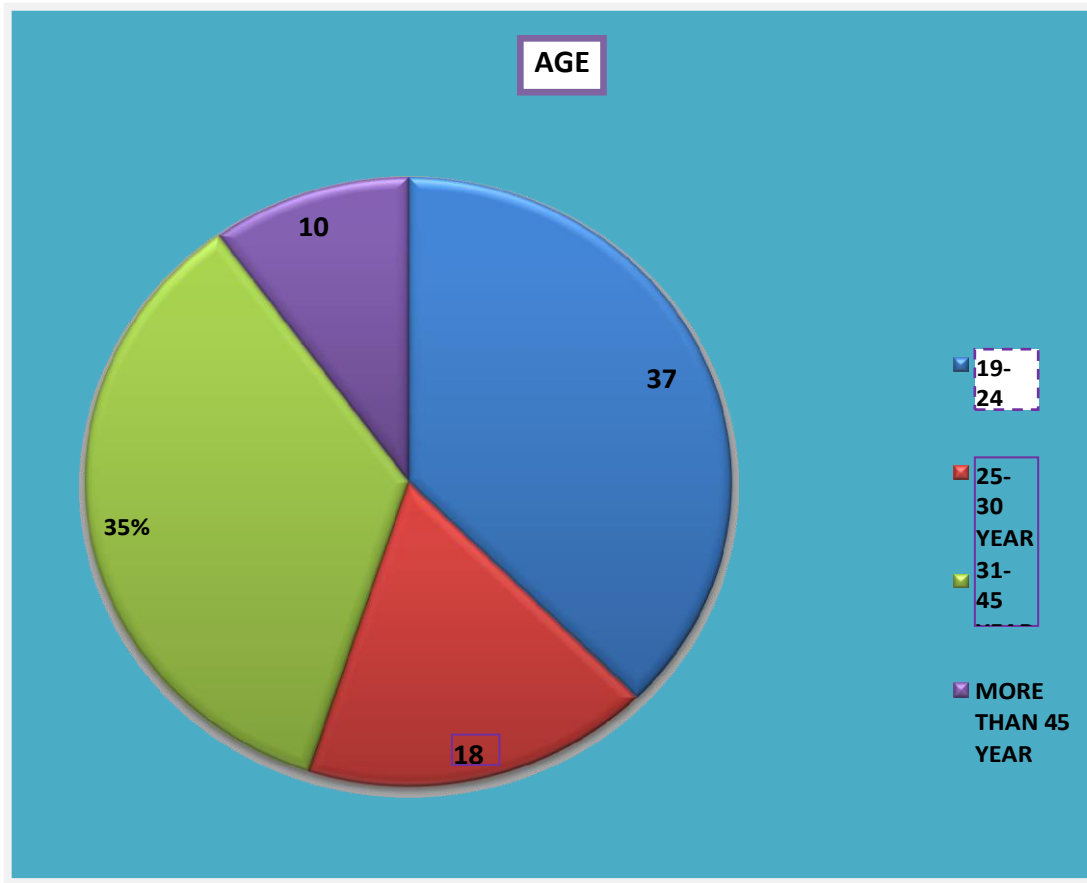
Fig:1 Percentage distribution of people according to age

According to age, 37.5% (15) people were in age group 19-24 years, 17.5%(7) people were in age group 25-30 years, 35.0%(14) people were in age group 31-45, and 10%(4) people were in age group more than 45 years.
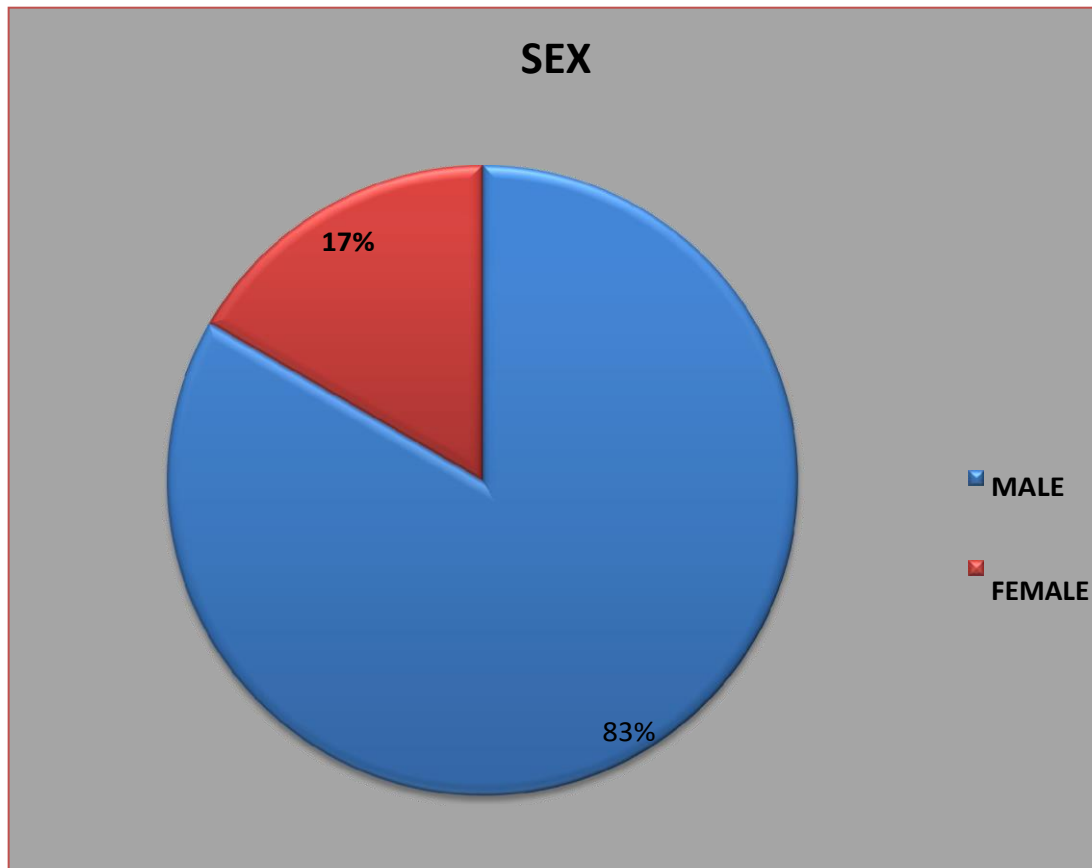
Fig:2Percentage distribution of people according to sex

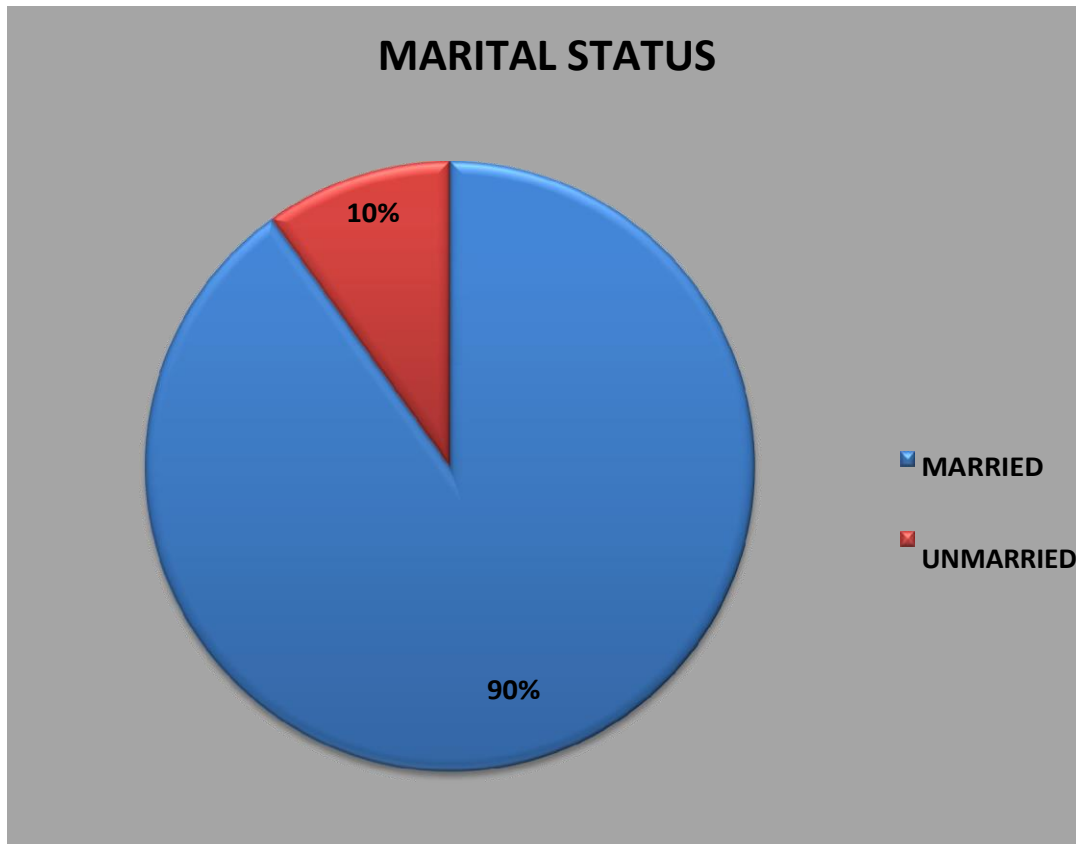According to gender,40%(16) people were males and 60%(24) people were females.

Fig: 3 Percentage distribution of people according to marital status.

According to marital status, 72.5%(29) people were married and 27.5%(11) people were unmarried.

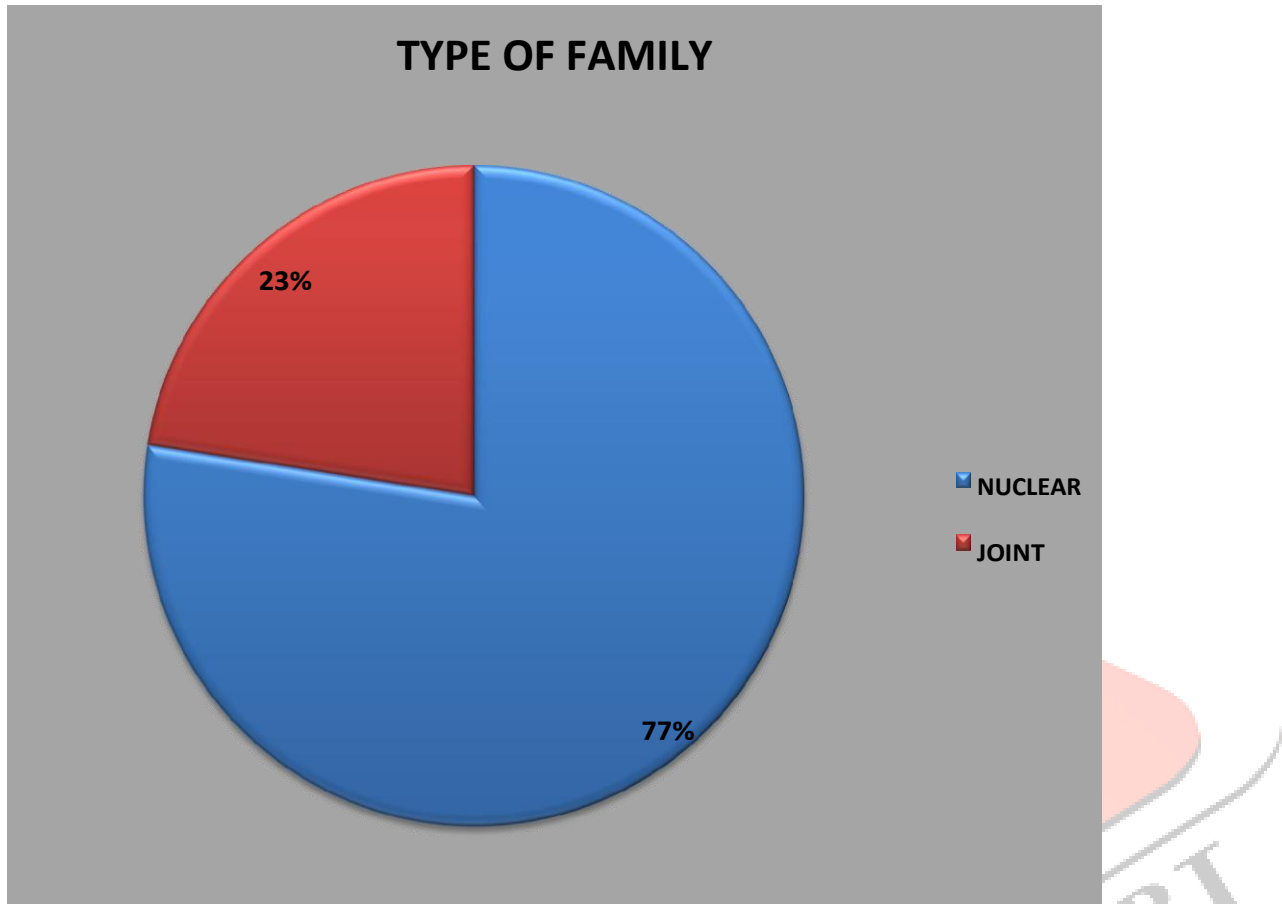**Fig: 4 Percentage distribution of people according to type of family.**

According to type of family, 27.5%(11)) people belong to nuclear family and 72.5%(29)

) people belong to joint family.
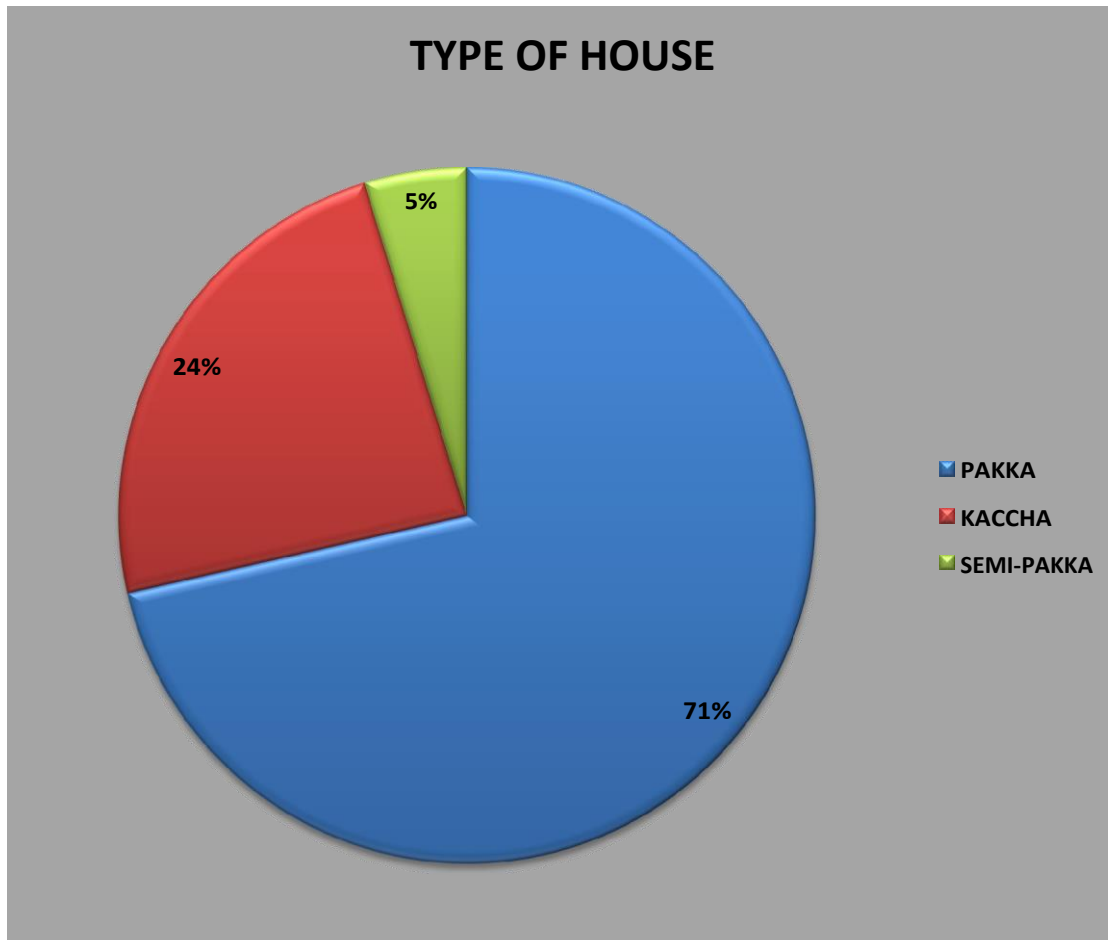
Fig: 5 Percentage distribution of people according to type of house.

According to type of house, 52.5%(21)) people lives in pakka house, 17.5%(7)) people lives in kaccha house and 30%(12) people lives in semi- pakka house.
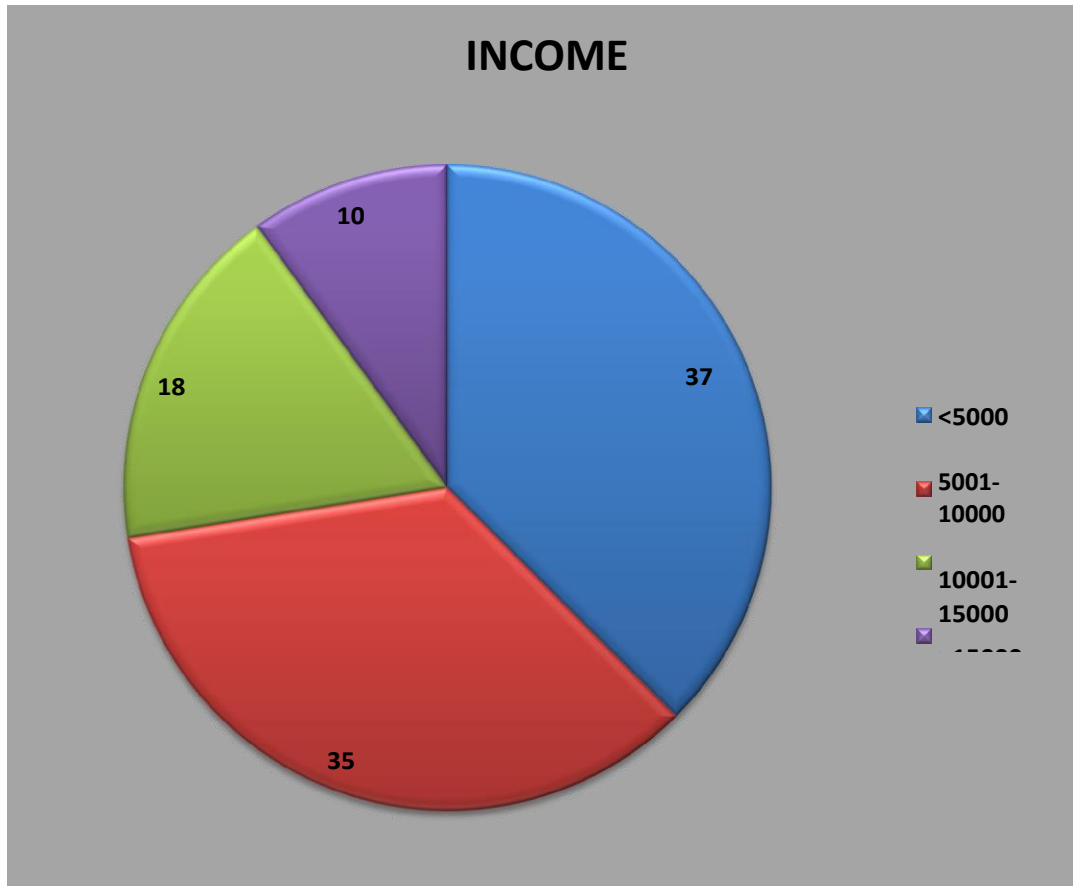
Fig: 6 Percentage distribution of people according to income

According to family income, 37.5%(15) family income was >5000, 35.0%(14) family income was 5001-10000, 17.5%(7) family income was 10001-15000, 10.0%(4) family income was more than 15000.
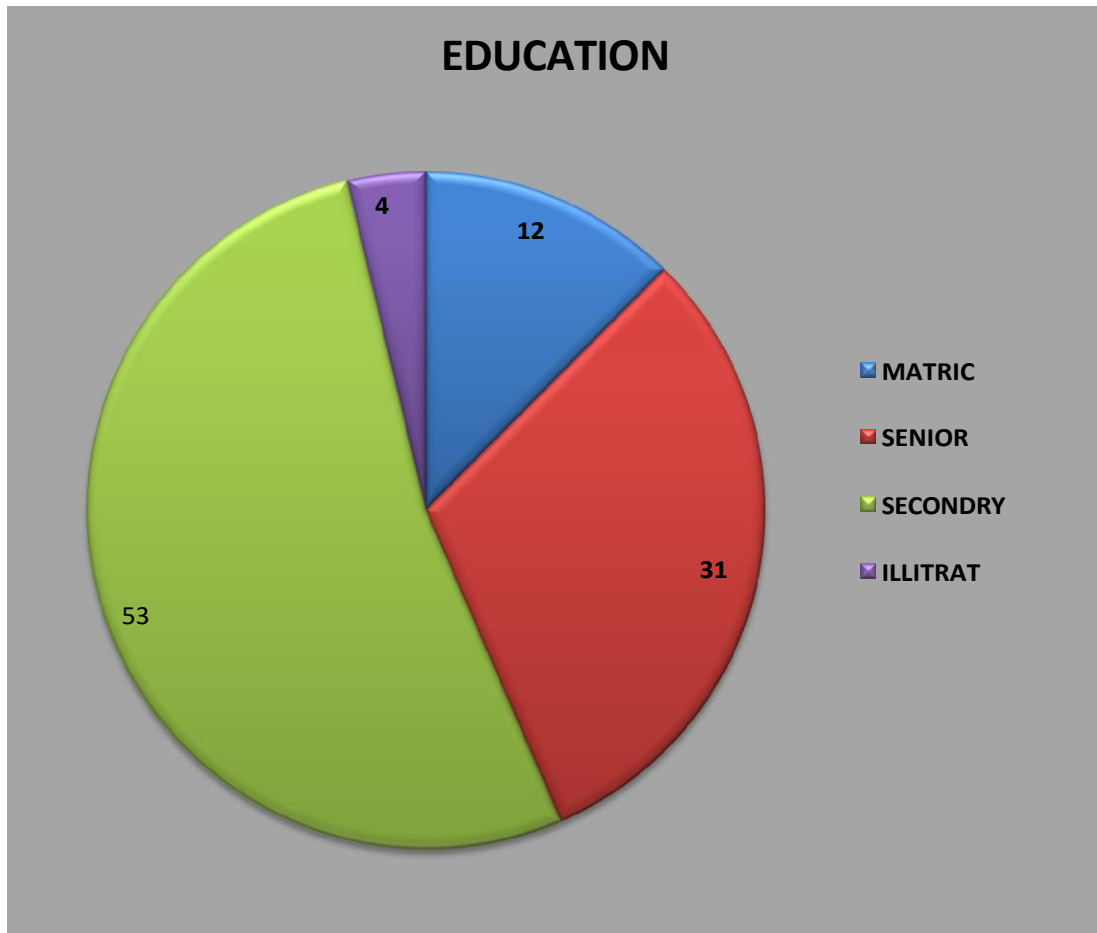
Fig: 7 Percentage distribution of people according to eucation.

According to education, 10%(4) people were matric passed, 25%(10) people were senior secondary passed, 42.5%(17) people were graduate, 22.5%(9) people were illitrate.
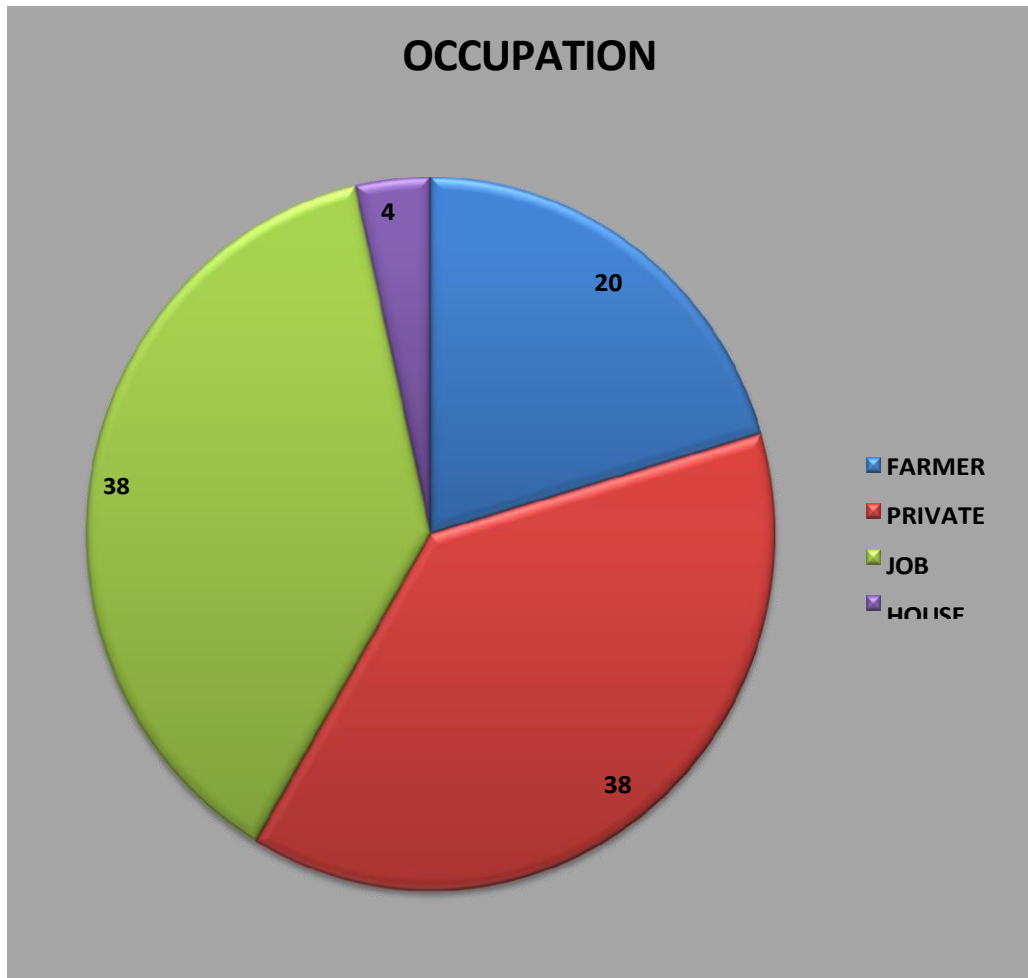
Fig: 8 Percentage distribution of people according to occupation.

According to occupation, 17.5%(7) people were farmer, 32.5%(13) people were private job , 32.5%(13)people were house-wife, 17.5%(7) people were student.
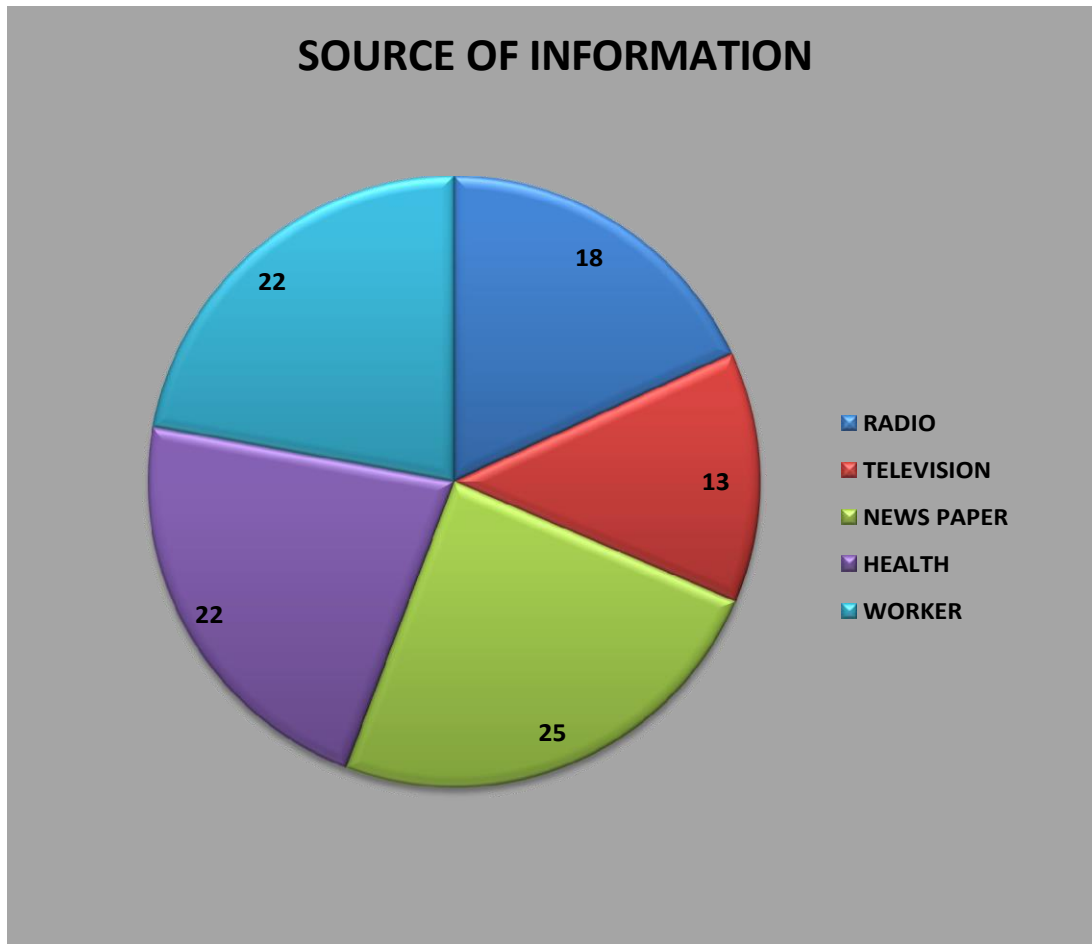
Fig: 9 Percentage distribution of people according to source of information.

According to source of information, 7.5%(3) people by radio, 15%(6) people by television , 27.5%(11)people by newspaper, 25%(10) people by health-worker and 25%(10) people by no-one.

SECTION II- Assessment of knowledge of people regarding prevention of dengue fever .

Objective 1- To assess the knowledge of people regarding prevention of dengue fever.

Table 2 : Mean knowldege score of people regarding prevention of dengue fever .

N=40

PEOPLE	MEAN SCORE	MEAN(%)	SD
Knowledge regardingprevention of dengue fever	19.98	19.98%	4.22

Maximum score=39 Minimum score=00

Table 2: shows the men score regarding care of elderly. It shows that people knowledge score regarding prevention of dengue fever was 19.98+-4.22

Table- 3

Frequency and percentage distribution of people according level of knowledge regarding prevention of dengue fever.

N=40

SR. NO.	PEOPLE LEVEL OF KNOWLEDGE Frequency		(%)
1.	Below average(0-13)	3	7.5
2.	Average(14-26)	35	87.5
3.	Good(27-39)	2	5.0

Maximum score=39

Minimum score=00

Table 3:shows the frequency and percentage distribution of people according level of knowledge regarding prevention of dengue fever. It shows that 3(7.5%) people are having below average knowledge, 35(87.5%) people are having average knowledge and 2(5.0%) people are having good knowledge.

Hence, it can be said that the people had average level of knowledge regarding prevention of dengue fever.

Fig.11: Percentage distribution of people according level of knowledge regrding prevention of dengue fever.

Shows the percentage distribution of people according to level of knowledge; 24.0% people were good, 39.0% people were average and 37,0% people were below average in knowledge regarding prevention of dengue fever.

SECTION III-Assessment of practice people regarding prevention of dengue fever.

Objective 1- To assess the practice people regarding prevention of dengue fever.

Table- 4 : **Mean practice score regarding prevention of dengue fever.**

N=40

PEOPLE	MEAN SCORE	MEAN(%)	SD
Practice regarding prevention of dengue fever.	4.9	4.9%	1.77

Maximum score=9 Minimum score=00

Table 4: shows the mean score regarding prevention of dengue fever. It shows that in people practice score regarding prevention of dengue fever was 4.9±1.77.

Table 5

Frequency and percenntage distribution of people according level of practice regarding prevention of dengue fever.

N=40

SR. NO.	LEVEL OF PRACTICE	PEOPLE	
		Frequency (f)	Percentage (%)
1.	Favourable(5-9)	28	70.0
2.	Unfavourble(0-4)	12	30.0

Maximum score=9 Minimum score=00

Table5 :shows the frequency and percentage distribution of people according to level of practice regarding prevention of dengue fever. It shows that 28(70%) people were practising favourable and 12(30%) people were practising unfavourable. Hence, it can be said that the people had do the favorable practice regarding prevention of dengue fever.
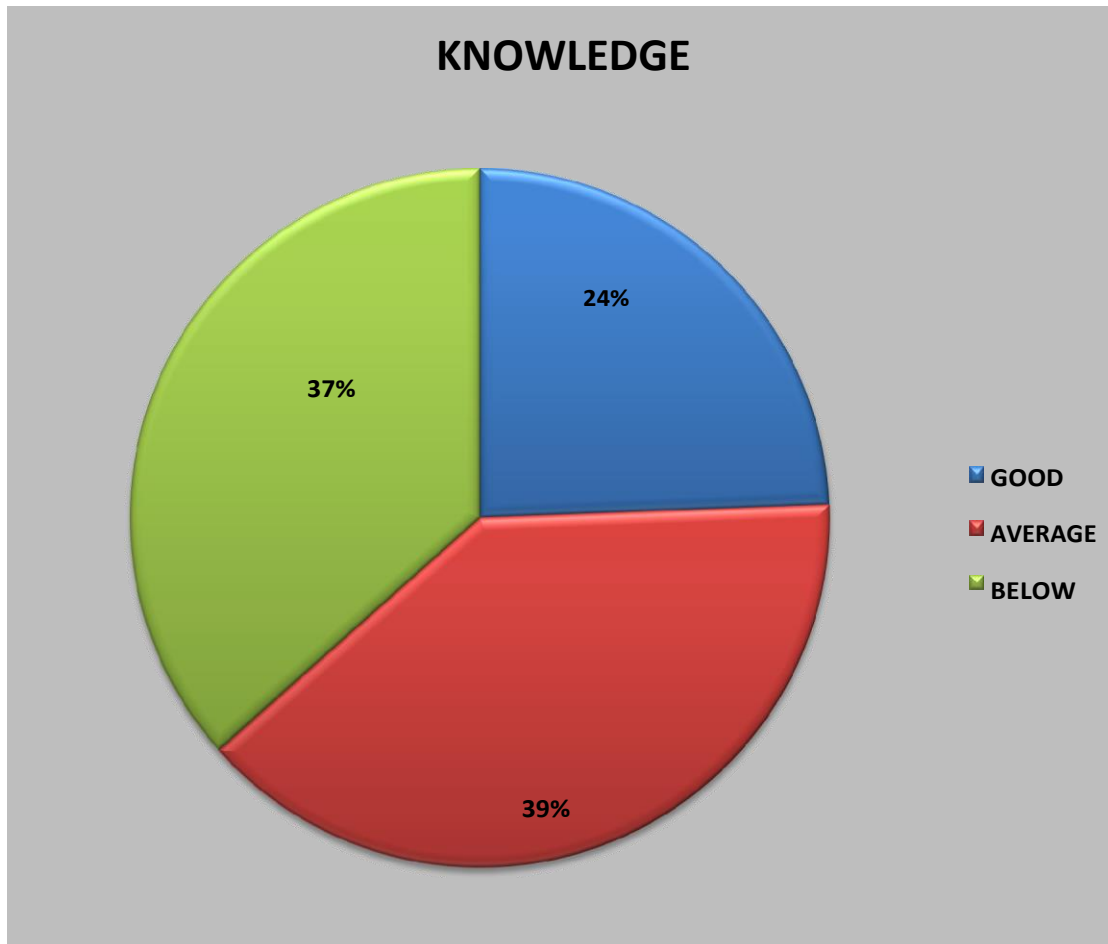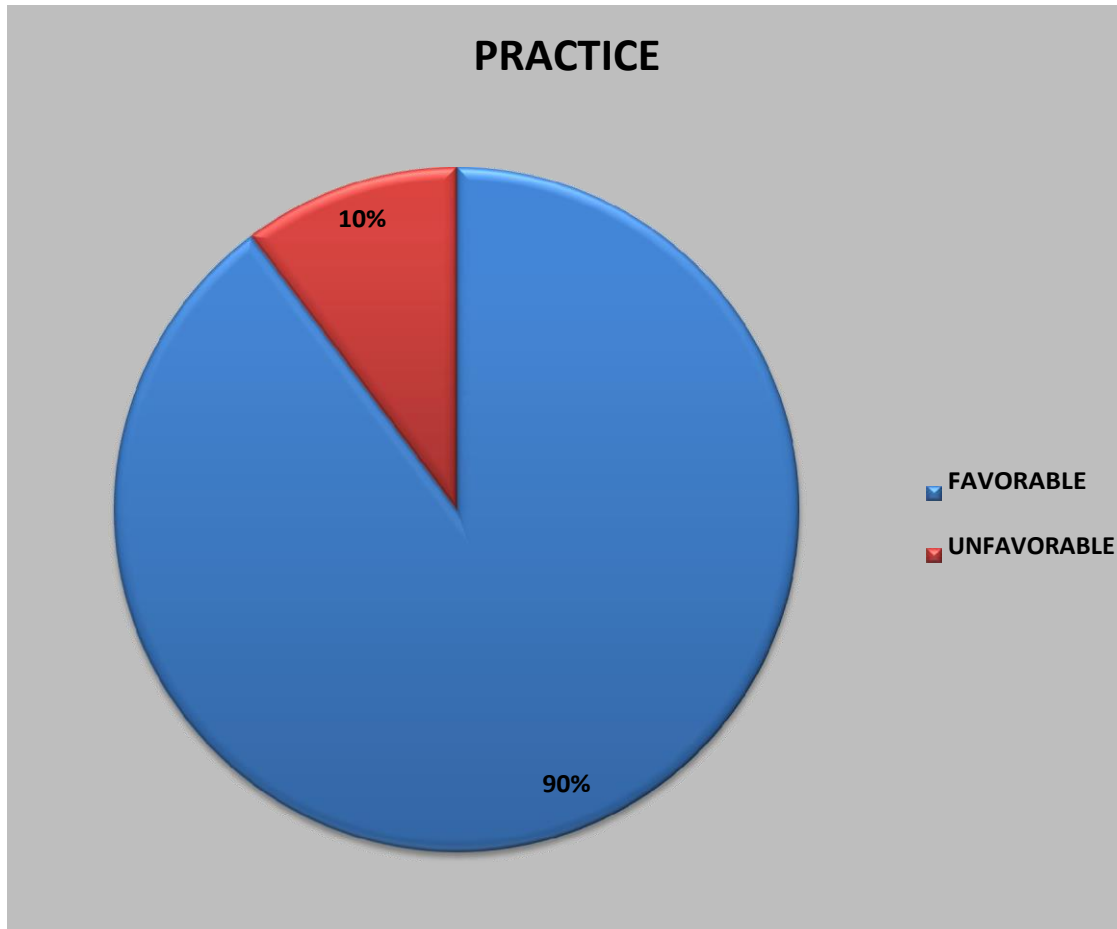
Fig.12 Percentage distribution of people according to level of practice rearding prevention of dengue fever.

Shows the percentage distribution of people according to practice, 90% people were practising favorable and 10% people were practising unfavorable regarding prevention of dengue fever.

<u>**SECTION IV**</u>: **Association of knowledge of people regarding prevention of dengue fever.**

<u>**Objective 3-**</u> To determine the association of knowledge of people regarding prevention of dengue fever selected demographic variables.

<u>**Table 6**</u> : Association of level of knowledge of peole regarding prevention of dengue feveraccording to age**.**
=40

NS=non-significant **Maximum score=39**

Minimum score=00

AGE(in years)	FREQUENCY(f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	avg	good			
19-24 years	15	1	13	1			
25-30 years	7	0	7	0			
31-45 years	14	1	12	1	6	0.0364	12.592^{NS}
					4		
45 and above	4	0	3	1			

Table 6:shows that people age group 19-24 years, 1 people had below average knowledge, 13 people had average knowledge and 1 people had good knowledge. Those of age group 25-30 years, 0 people had below average knowledge, 7 people had average knowledge and 0 people had good knowledge. Those of age group 31-45 years, 1 had below average knowledge, 12 had average knowledge, 1 had good knowledge. Those of age group 46 and above, 0 had below average knowledge, 3 had average knowledge, 0 had good knowledge. This difference in the frequency was statistically non-significant at p<0.05 level.Hence, it can be said that age had no effect on people knowledge regarding prevention of dengue fever.

Table 7

Association of level of knowledge of people regarding prevention of dengue fever according to sex. N=40

SEX	FREQUENCY(f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	Avg	good			
a. Male	16	1	13	1	2	0.118	5.991^{NS}
b. Female	24	2	22	0			

NS=Non-Significan   Minimumscore=00

Maximum score=39

Table 7:shows that among 16 male people, 1 people had below average knowledge, 13 people had average knowledge, 2 people had good knowledge. Among 24 female people, 2 members had below average knowledge, 22 people had average knowledge, 0 people had good knowledge. This difference in the frequency was statistically non-significnt at p<0.05 level. Hence, it can be said that sex had no effect on knowledge of people regarding prevention of dengue fever.

TABLE-8

Association of level of knowledge of people regarding prevention of dengue fever according to marital

status

N=40

MARITAL STATUS	FREQUENCY (f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	avg	good			
Married	29	1 26	2	2	0.0311	5.991[NS]	
Unmarried	11	1	9	1			

NS=Non-Significant,   Maximum score = 39,   Minimum score=00

Table 8:shows that among 29 married people, 1 people had below average knowledge, 26 people had average knowledge, 2 people had good knowledge. Among 11 unmarried people, 1 people had below average knowledge, 9 people had average knowledge, 1 people had good knowledge. This difference in the frequency was statistically non- significnt at $p<0.05$ level. Hence, it can be said that marital status had no effect on knowledge of people regarding prevention of dengue fever

TABLE-9

Association of level of knowledge of people regarding prevention of dengue fever according to type of family.

N=40

TYPE OF FAMILY	FREQUENCY (f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	Avg	good			
Nuclear family	11	0	9	2	2	0.1036	5.991[NS]
Joint family	29	2	26	1			

NS=Non-significant

Maximum score= 39

Minimum score=00

Table 9: shows that among 11 people belong to nuclear family, 2 people had below average knowledge, 9 people had average knowledge, 0 people had good knowledge. Among 29 people belong to joint family, 1 people had below average knowledge, 26 people had average knowledge, 2 people had good knowledge. This difference in the frequency was statistically non-significant at $p<0.05$ level.

Hence, it can be said that type of family had no effect on knowledge of people regarding prevention of dengue fever

Table 10

Association of level of knowledge of people regarding prevention of dengue fever according to type of house.

N=40

TYPE OF HOUSE	FREQUENCY (f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	Avg	good			
Pakka House	21	2	18	1	4	0.0476	9.491[NS]
Kacchaa House	7	0	7	0			
Semi- Pakka	11	1	9	1			

NS=non-significant   Maximum

score=39

Minimum score=00

Table 10: shows that among 21 people lives in pakka house, 2 people had below average knowledge, 18 people had average knowledge, 1 people had good knowledge. Among 7 people lives in kaccha house, 0 people had below average knowledge, 7 people had average knowledge, 0 people had good knowledge. Among 11 people lives in semi- pakka house, 1 people had below average knowledge, 9 people had average knowledge, 1 people had good knowledge. This difference in the frequency was statistically non- significnt at $p<0.05$ level. Hence, it can be said that type of family had no effect on knowledge of people regarding prevention of dengue fever

TABLE- 11

Association of level of knowledge of people regarding prevention of dengue fever according to family income.

N=40

LEVEL OF FAMILY INCOME	FREQUENCY (f)	KNOWLEDGE Below avg	Avg	good	df	χ^2 cal.	χ^2 tab.
Less than 5000	15	0	14	1			
5001-10000	14	1	13	0			
10001-15000	7	1	6	0	6	0.17231	12.592^{NS}
More than 15000	4	1	2	1			

NS=non-significant   **Maximum score=39**

                                                                          Minimum score=00

Table 11: shows that, people family income less than 5000, 0 people had below averaege knowledge, 14 people had average knowledge, 1 people had good knowledge. Among people family income 5001-10000,0 people had below averaege knowledge, 13 people had average knowledge, 0 people had good knowledge. Among people family incom 10001-15000, 1 people had below average knowldege, 6 people had average knowledge, 0 people had good knowledge. Among people family income more than 15000,1 people had below average knowldege, 2 people had average knowledge, 1 people had good knowledge. This difference in

the frequency were statistically non-significant at $p<0.05$ level. Hence, it can be said that family income had no effect on knowledge of people regarding prevention of dengue fever

TABLE- 12

Association of level of knowledge of people regarding prevention of dengue fever according to education.

N=40

LEVEL OF EDUCATION STATUS	FREQUENCY (f)	KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	Avg	good			
Matric	4	0	4	0			
Senior-secondary	10	0	9	1			
Graduate	17	3	13	1	6	0.2422 NS	12.592
Illitrate	9	0	9	0			

NS=non-significant Maximum

score=39 Minimum score=00

Table 12; shows that, among matric passed people, 0 people had below average knowledge, 4 people had average knowledge, 0 people had good knowledge. Among senior-scondary passed people, 0 people had below average knowldege, 9 people had average knowledge, 1 people had good knowledge. Among graduate people , 3 people had below average knowldege, 13 people had average knowledge, 1 people had good

knowledge. Among illitrate people ,0 people had below average knowldege, 9 people had average knowledge, 0 people had good knowledge. This difference in the frequency were statistically non-significant at $p<0.05$ level. Hence, it can be said that education had no effect on knowledge of people regarding prevention of dengue fever.

TABLE- 13

Association of level of knowledge of people regarding prevention of dengue fever according to occupation.

N=40

OCCUPATION	FREQUENCY (f)	LEVEL OF KNOWLEDGE			df	χ^2 cal.	χ^2 tab.
		Below avg	Avg	good			
Farmer	7	0	7	0			
Private job	13	0	11	2			
House wife	13	1	12	0	6	4.010	12.59 NS
Student	7	2	5	0			

NS=non-significant   **Maximum score=39**

Minimum score = 00

Table 13: shows that, among people working as farmer, 0 had below average knowledge, 7 had average knowledge, 0 had good knowledge. Among people working as private employee, 0 had below average knowledge, 11 had average knowledge, 2 had good knowledge. Among people 13 women's working as

housewife, 1 had below average knowledge, 12 had average knowledge, 1 had good knowledge. Among people , 1 had below average knowledge, 12 had average knowledge, 0 had good knowledge. among people 7 are student , 2 had below average knowledge, 5 had average knowledge, o had good knowledge. This difference in the frequency were statistically non-significant at $p < 0.05$ level. Hence, it can be said that occupation had no effect on knowledge of people regarding prevention of dengue fever.

TABLE- 14

Association of level of knowledge of people regarding prevention of dengue fever according to source of information.

N=40

SOURCE OF INFORMATION	FREQUENCY (f)	Below avg.	Avg.	good	df	χ^2 cal.	χ^2 tab.
Radio	3	0	3	0			
Television	6	0	6	0			
News paper	11	0	10	1	8	14606	15.507[NS]
Health worker	10	2	7	1			
No-one	10	1	9	0			

NS= Non-significant   **Maximum score=39**

Minimum

score=00

Table 14: shows that, among people received information through radio, 0 had below average knowledge, 3 had average knowledge, 0 had good knowledge. Among people received information through television,0 had below average knowledge, 6 had average knowledge, 0 had good knowledge. Among people received information through news paper, 0 had below average knowledge, 10 had average knowledge, 1 had good knowledge. Among people received information through health worker, 2 had below average knowledge, 7 had average knowledge, 1 had good knowledge.Among people received information through no one, 1 had below average knowledge, 9 had average knowledge, 0 had good knowledge. This difference in the frequency

were statistically non-significant at p<0.05 level. Hence, it can be said that source of information had no effect on knowledge of people regarding prevention of dengue fever.

SECTION V: Association of practice level of people regarding prevention of dengue fever.

Objective 4- To determine the association of practice of people regarding prevention of dengue fever selected demographic variables.

TABLE- 15 : Association of practicelevel of people regarding prevention of dengue fever according to age.

AGE (in years)	FREQUENCY (f)

LEVEL OF	PRACTICE	df	χ^2 cal.	χ^2 tab.	Favourable	unfavourable
19-24	15	11	4			
years 25-30 years 31-45 years 45 and above	7	4	3			
	14	9	5	3	0.157	7.81[NS]
	4	4	0			

NS=non-significant   **Maximum**

score=9   **Minimum score=00**

Table 15: shows that people age group 19-24 years, 11 people were practising favourable and 4 people were practising unfavourable. Those of age group 25-30 years, 4 were practising favourable and 3 people were practising unfavourable. Those of age group 31- 45 years, 9 people were practising favourable and 5 were practising unfavourable. Those of age group 46 and above, 4 people were practising favourable and o people were practising unfavourable. This difference in the frequency was statistically non-significant at p<0.05 level. Hence, it can be said that age had no effect on people practice regarding prevention of dengue fever.

TABLE- 16 : Association of practice level of people regarding prevention of dengue fever according to sex.

N=40

	SEX	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ^2 cal.	χ^2 tab.
Favourable	unfavourable						
	Male	16	11	5	2	0.004	3.84[NS]
	Female	24	17	7	0		

NS=Non-Significant

score=9

Minimum score=00

Maximum

Table 17: shows that among 16 male people, 11 people were practising favourable and 5 people were practising unfavourable. Among 24 female people, 17 female's were practising favourable and 7 female's were practising unfavourable. This difference in the frequency was statistically non-significnt at $p<0.05$ level.

Hence, it can be said that sex had no effect on practice of people regarding prevention of dengue fever.

TABLE- 17

Association practice level of people regarding prevention of dengue fever according to marital status.
N=40

MARITAL STATUS	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ^2 cal.	χ^2 tab.
		Favourable	unfavourable			
Married	29	20	9	1	0.009	3.84^{NS}
Unmarried	11	8	3			

NS=Non-Significant   Maximum

score=9   Minimum score=00

Table 18:shows that among 29 married people 20 people were practising favourable and 9 people were practing unfavourable. Among 11 unmarried people, 8 people were practising favourable and 3 people were practising unfavourable. This difference in the frequency was statistically non-significnt at $p<0.05$ level. Hence, it can be said that marital status had no effect on practice of people regarding prevention of dengue fever.

TABLE- 18

Association practice level of people regarding prevention of dengue fever according to type of family.

$N = 40$

FAMILY	TYPE OF	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ^2 cal.	χ^2 tab.
			Favourable	unfavourable			
	Nuclear family	11	9	2		10.0169	3.84[NS]
	Joint family	29	19	10	0		

NS=non-significant   **Maximum**

score=9   **Minimum score=00**

Table 19:shows that among 11 people belong to nuclear family, 9 people were practising favourable and 2 people were practising unfavourable. Among 29 people belong to joint family, 19 people were practising favourable and 10 people were practising unfavourable. This difference in the frequency was statistically non-significnt at $p<0.05$ level. Hence, it can be said that type of family had no effect on practice of people regarding prevention of dengue fever

TABLE- 19

Association practice level of people regarding prevention of dengue fever according to type of house. N=40

TYPE OF HOUSE	FREQUENCY (f)	LEVEL OF PRACTICE Favourable	unfavourable	df	χ^2 cal.	χ^2 tab.
Pakka House	21	15	6	2	0.313	5.99[NS]
Kachha House	7	3	4			
Semi-Pakka	11	10	2			

NS=non-significant   **Maximum score=9**

Minimum

score=00

Table 20:shows that among 21 people lives in pakka house, 15 people were practising favourable and 6 people were practising unfavourable.. Among 7 people lives in kaccha house, 3 people were practising favourable and 4 people were practising unfavourable. Among 11 people lives in semi-pakka house, 10 people were practising favourable and 2 people were practising unfavourable. This difference in the frequency was statistically non-significnt at p<0.05 level. Hence, it can be said that type of family had no effect on practice of people regarding prevention of dengue fever

Table 20

Association practice level of people regarding prevention of dengue fever according to family income.

N = 40

FAMILY INCOME	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ² cal.	χ² tab.
		Favourable	unfavourable			
Less than 5000	15	10	5			
5001-10000	14	10	4			
10001-15000	7	6	1	3	0.107 NS	7.81
More than15000	4	2	2			

NS=non-significant   Maximum score=9

Minimum

score=00

Table 21:shows that, people family income less than 5000, 10 people were practising favourable and 5 people were practising unfavourable.. Among people family income 5001-10000,4 people were practising favourable and 11 people were practising unfavourable. Among people family incom 10001-15000, 6 people were practising favourable and 1 people were practising unfavourable. Among people family income more than 15000,2 people were practising favourable and 2 people were practising unfavourable. This difference in the frequency were statistically non-significant at p<0.05 level. Hence, it can be said that family income had no effect on practice of people regarding prevention of dengue fever.

TABLE- 21

Association practice level of people regarding prevention of dengue fever according to education.

<div align="center">

N=40

</div>

EDUCATION	FREQUENCY	LEVEL OF PRACTICE		df	χ^2	χ^2
STATUS (f)		Favourable	Unfavourable		cal.	tab.
Matric	4	0	4			
Senior-secondary	10	0	9			
Graduate	17	3	13	3	0.117	7.81^{Ns}
Illitrate	9	0	9			

NS=non-significant   **Maximum score=9**

Minimum

score=00

Table 22:shows that, among matric passed people, 3 people were practising favourable and 1 people were practising unfavourable. Among senior-scondary passed people, 6 people were practising favourable and 4 people were practising unfavourable. Among graduate people , 13 people were practising favourable and 4 people were practising unfavourable. Among illitrate people ,6 people were practising favourable and 3 people were practising unfavourable. This difference in the frequency were statistically non- significant at p<0.05 level. Hence, it can be said that education had no effect on practice of people regarding prevention of dengue fever.

TABLE-22

Association practice level of people regarding prevention of dengue fever according to occupation.

N=40

OCCUPATION	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ^2 cal.	χ^2 tab.
		Favourable	Unfavourable			
Farmer	7	5	2			
Private job	13	9	4	4		
House wife	13	8	5		.3942	7.81^{NS}
Student	7	6	1			

NS=non-significant   **Maximum score=9**

Minimum

score=00

Table 23:shows that, among people working as farmer, 5 people were practising favourable and 2 people were practising unfavourable. Among people working as private employee, 9 people were practising favourable and 4 people were practising unfavourable. Among people 13 women's working as housewife, 8 women were practising favourable and 5 women were practising unfavourable. Among people were students, 6 student's were practising favourable and 1 student's were practising unfavourable. This difference in the frequency were statistically non-significant at $p<0.05$ level. Hence, it can be said that occupation had no effect on practice of people regarding prevention of dengue fever.

Table 23

Association practice level of people regarding prevention of dengue fever according to source of information.   **N=40**

SOURCE OF INFORMATION	FREQUENCY (f)	LEVEL OF PRACTICE		df	χ^2 cal.	χ^2 tab.
		favourable	unfavourable			
Radio	3	3	0			
Television	6	4	2			
News paper	11	8	3	4	0.0475	9.49[NS]
Health worker	10	7	3			
No-one	10	6	4			

NS= Non-significant Maximum

score=09   **Minimum score=00**

Table 24shows that, among people received information through radio, 3 people were practising favourable and 0 people were practising unfavourable. Among people received information through television,4 people were practising favourable and 2 people were practising unfavourable.. Among people received information through news paper 8 people were practising favourable and 3 people were practising unfavourable. Among people received information through health worker, 7 people were practising favourable and 3 people were practising unfavourable. Among people received information through no one, 6 people were practising favourable and 4 people were practising unfavourable. This difference in the frequency were statistically non-significant at $p<0.05$ level. Hence, it can be said that source of information had no effect on practice of people regarding prevention of dengue fever.

Major findings:

Section I: Analysis of demographic variables by using frequency and percentage.

➢ Findings of the study depicts that majority of people 15(37.5%) were in age group of 19-24 years, 24(60%) people were females, 29(72.5%) people belong to joint family, 15(37.5%) people family income more than 5000, majority 17(42.5%) were graduate, 29(72.5%) people were married, 21(52.5%) people living in pakka house, 13(32.5%) people were working in private sector and 13(32.5%)were house wife and 11 (27.5%) people gained knowledge through news paper.

Section II: Assessment of knowledge of people regarding prevention of dengue fever. Objective I : To assess the knowledge people regarding prevention of dengue fever.

- Mean knowledge score regarding prevention of dengue fever was 19.98±4.22.

- It show hat 35(87.5%) people average knowledge(9-16) regarding prevention of dengue fever.

Section II: Assessment of practice of people regarding prevention of dengue fever. Objective II : To assess the practice of people regarding prevention of dengue fever.

- Mean practice score regarding prevention of dengue fever was 4.9±1.77.

- It shows that 28(70%) people were practising favourable.

Section III- Association of knowledge and practice with selected demographic variables by using chi square test.

Objective 3: To determine the association of knowledge and practice people regarding prevention of dengue fever with selected demographic variables.

- There was non-siginificant association of knowledge of people regarding prevention of dengue fever members with selected demographic variables such as age, sex, marital status, income, education, and type of family, type of house, occupation, and source of information.

- There was non-siginificant association of practice of people regarding prevention of dengue fever with selected demographic variables such as age, sex, marital status, income, education, and type of family, type of house, occupation, and source of information

V - CONCLUSION

The present was conducted among 40 people to assess the knowledge and practice of people regarding prevention of dengue fever in residing area of Chaubepur, Kanpur Nagar.

- On the basis of knowledge regarding prevention of dengue fever the mean score of people in residing area in Chaubepur 19.98 ± 4.22.

- On the basis of practice regarding prevention of dengue fever the mean score of people in residing area in Chaubepur 4.9 ± 1.77.

- There was non significant association of the knowledge and practice of people regarding prevention of dengue fever with selected demographic variable such as age, sex etc.

- The following conclusions were drawn on the basis of the results of the present study topic to assess the knowledge and practices of people regarding prevention of dengue fever in residing area of chaubepur Kanpur Nagar.

There is a felt need for bridging the gap between knowledge and practice in residing area of chaubepur about prevention of dengue fever. It is a challenge for all the health care provider in the community especially in rural area.

The findings of the study suggest many implications for all the health personnel. The most important role is to provide awareness to the public regarding prevention of dengue fever. Several implications can be drawn from the present study. The health personnel have added responsibility in educating the public regarding disease prevention and help in maintenance of health by modification of lifestyles. Health education conducted by the health personnel in the hospital and community helps in wider coverage of public in preventing dengue fever. If health personnel provide the necessary information regarding dengue fever and its prevention, they are the correct persons to educate people, there by people can understand and they can educate their family members, from family members to the neighbors, from them to the community.

Health care provider should take an initiative in creating policies and plans in providing education to the people. In service education to be provided to the health personnel at various levels to make them aware of dengue fever and its prevention. Knowledge and practices regarding prevention of dengue fever should be updated by utilizing various communication facilities. Health education program should be included as a part of job description of various categories of health personnel. The heath personnel also should plan the outreach activities in collaboration with the other agencies in imparting the knowledge to the community. Programs be planned to remove the water logging areas and mosquito breeding places with Civic authorities and voluntary agencies.

Since dengue fever is the re-emerging disease of global concern, more resources should be allocated to do research on dengue fever and its preventives measures. There is a great need of research in the areas of client education. Health related studies need to concentrate on behavior modifications of people by developing unique teaching programs. Research on newer methods of teaching, focusing on people interest, community participation and cost–effectiveness are needed.
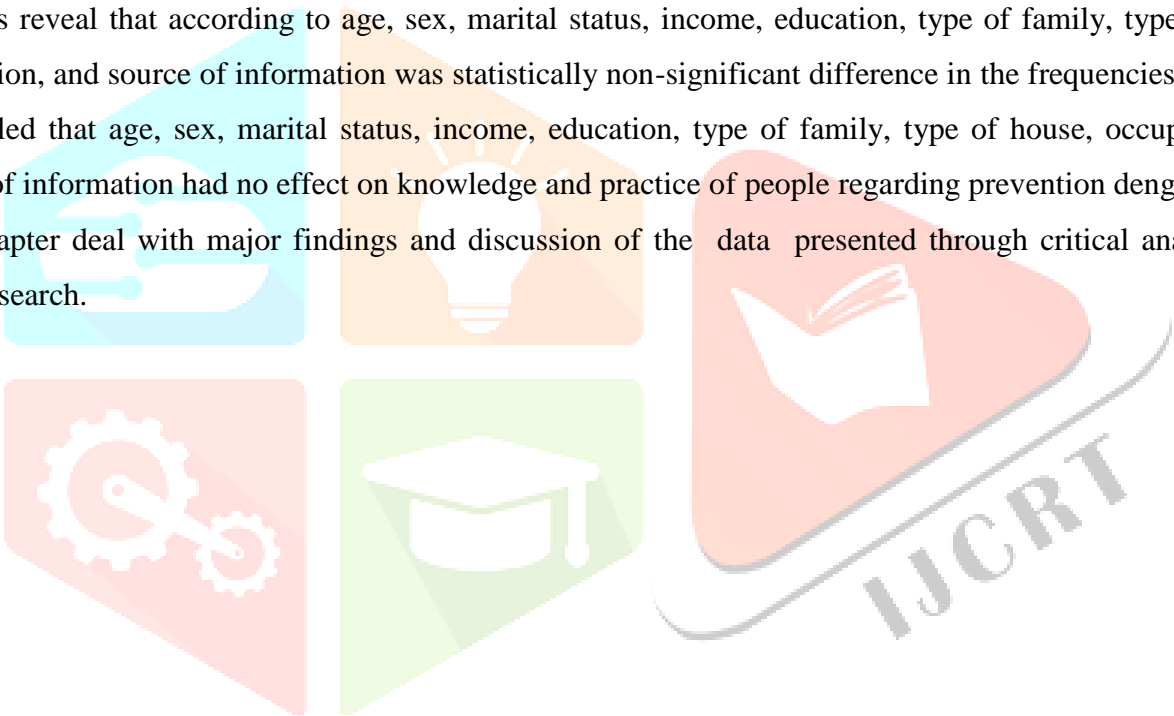
VI - DISCUSSION

This chapter relates with the findings of the present study with the findings of the studies conducted in the past. Present study findings have been discussed accordance with the objective of this study.

➢ Analysis of the data regarding 1st objective of the study i.e. to assess the knowledge of people regarding

prevention of dengue fever shows that mean knowledge score regarding dengue fever was 19.98 ± 4.22 and 35 (87.5%) people had average knowledge regarding prevention of dengue fever.

➤ Analysis of the 2nd objective of the study i.e. to assess the practice of people regarding prevention of dengue fever shows that mean practice score regarding dengue fever was 4.9 ± 1.77 and 28 (70%) people had been practicing favorable regarding prevention of dengue fever.

➤ Analysis of the 3rd objective of the study i.e. to assess the association of knowledge and practice people regarding prevention of dengue fever with selected demographic variables according to age, sex, marital status, income, education, type of family, type of house , occupation, and source of information regarding prevention of dengue fever.

➤ Findings reveal that according to age, sex, marital status, income, education, type of family, type of house, occupation, and source of information was statistically non-significant difference in the frequencies at p<0.05. It revealed that age, sex, marital status, income, education, type of family, type of house, occupation, and source of information had no effect on knowledge and practice of people regarding prevention dengue fever.

➤ This chapter deal with major findings and discussion of the data presented through critical analysis with some research.

VII - REFERENCES

1. WHO,(2019).https://www.who.int/news-room/fact-sheets/detail/dengue-and-severe-dengue reviewed on 03/02/2019

2. S Bhatt (2014) http://ijrhs.org/article/2014/2/3-9 reviewed on 04/02/2019

3. MS Pedrosa (2017) https://onlinelibrary.wiley.com/doi/pdf/10.1111/adj.12516 reviewed on 05/02/2019

4. ChristopherThiamSeongLim(2019),https://www.emjreviews.com/nephrology/arti cle/dengue-associated-acute-kidney-infection-an-updated-and-comprehensive-qualitative-review-of-literature/ reviewed on 06/02/2019

5. DuaneJ.Gubler*https://www.ncbi.nlm.nih.gov/pmc/articles/PMC88892/reviewedon 07/02/2019

6. Health news (2019) https://www.business-standard.com/article/news-ani/67-377- dengue-cases-48-deaths-reported-across-india-till-oct-this-year-119101801587_1.html reviewed on 08/02/2019

7. B.Bandyopadhyay-(2012),https://www.hindawi.com/journals/isrn/2013/207580/ reviewed on 09/02/2019

8. E.Gupta,(2014),https://www.dovepress.com/current-perspectives-on-the-spread-of-dengue-in-india-peer-reviewed-fulltext-article-IDR reviewed on 10/02/2019

9. M.Singh,(2019),http://www.jhrr.org/article.asp?issn=23942010;year=2017;volum e=4;issue=3;spage=104;epage=107;aulast=Singh reviewed on 11/02/2019

10. Polit D.F.Hungler B.P. Nursing Research Principal and Method 7th Edition Philadephia; alippincott 2004. reviewed on 12/02/2019

11. Monica.Singh,"et.al"(2017),http://www.jhrr.org/article.asp?issn=23942010;year=2017;volume=4;issue=3;spage=104;epage=107;aulast=Singhreviewedon 13/02/2019

12. Anju.Dinkar,Jitendra.Singh(2018),http://www.tcmjmed.com/article.asp?issn=10163190;year=2020;volume=32;issue=1;spage=36;epage=40;aulast=Dinkar/reviewe d.on 14/02/2019

13. Parasuraman.Ganesh.kumar,(2018),https://www.ncbi.nlm.nih.gov/pmc/articles/P MC6078327/ reviewed on 15/02/2019

14. Shamimul.Hasan,2016),https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4784057 / reviewed on 16/02/2019

15. Prabhavathi,"etal"(2017),https://pediatrics.medresearch.in/index.php/ijpr/article/vi ew/286/570 reviewed on 17/02/2019

16. Jayanthi.Shastri,(2017),https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5607761/ reviewed on 18/02/2019

17. GetachewFerede,(2018),https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5968207 / reviewed on 19/02/2019

18. HuongVanNguyen(2017),https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6466316/reviewed　　　　on 20/02/2019

19. Harish S, "et al" (2017) https://www.alliedacademies.org/articles/knowledge- attitude-and-practice-regarding-dengue-infection-among-parentsof-children-hospitalized-for-dengue-fever-9997.html reviewed on 21/02/2019

20. VinothGnanaChellaiyan,(2017),https://www.researchgate.net/publication/312928 518_Knowledge_and_awareness_towards_dengue_infection_and_its_prevention_ a_cross_sectional_study_from_rural_area_of_Tamil_Nadu_Indiareviewedon 22/02/2019

21. Sk.Senthil.Kumar,(2018),https://jcdr.net/articles/PDF/12605/38149_CE[Ra1]_F(AC)_PF1(AJ_KM)_PFA(AJ_KM_SHU)_PN(SL).pdf reviewed on 23/02/2019

22. PrasharPK(2019).https://grfpublishers.com/article/view/OTA=/Knowledge-Attitude-and-Practices-of-University-Students-towards-Prevention-of-Dengue-in-Northern-India-A-Questionnaire-Based-Study reviewed on 24/02/2019

23. Polit D.F.Hungler B.P. Nursing Research Principal and Method 6th Edition Philadephia; alippincott 1999. reviewed on 25/02/2019

24. Polit D.F.Hungler B.P. Nursing Research Principal and Method 6th Edition Philadephia; alippincott 1999. reviewed on 26/02/2019

25. Burns N.,Groove S.K. Understanding Nursing Research. 6th Edition, New Delhi; Harcourt(India) Private Limited; 2002. reviewed on 27/02/2019

26. Polit D.F.Hungler B.P. Nursing Research Principal and Method 6th Edition Philadephia; alippincott 1999. reviewed on 28/02/2019

27. Polit D.F.Hungler B.P. Nursing Research Principal and Method 7th Edition Philadephia; alippincott 2004. reviewed on 03/03/2019

28. Burns N.,Groove S.K. Understanding Nursing Research. 7th Edition, New Delhi; Harcourt(India) Private Limited; 2003. reviewed on 05/03/2019

29. Polit D.F.Hungler B.P. Nursing Research Principal and Method 7th Edition Philadephia; alippincott 2004. reviewed on 12/03/2019

30. Burns N.,Groove S.K. Understanding Nursing Research. 7th Edition, New Delhi; Harcourt(India) Private Limited; 2003. reviewed on 15/03/2019

31. Polit D.F.Hungler B.P. Nursing Research Principal and Method 7th Edition Philadephia; alippincott 2004. reviewed on 18/03/2019

32. Burns N.,Groove S.K. Understanding Nursing Research. 7th Edition, New Delhi; Harcourt(India) Private Limited; 2003. reviewed on 20/03/2019