DISSERTATION ON

A STUDY TO ASSESS THE IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AT SELECTED GOVERNMENT SCHOOL, CHENNAI.

M.Sc (NURSING) DEGREE EXAMINATION
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COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE, CHENNAI – 600 003

A dissertation submitted to
THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY,
CHENNAI – 600 032

In partial fulfilment of the requirement for the award of degree of
MASTER OF SCIENCE IN NURSING

OCTOBER 2020

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CERTIFICATE

This is to certify that this dissertation titled, **"A STUDY TO ASSESS THE IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AT SELECTED GOVERNMENT SCHOOL, CHENNAI"**, is a bonafide work done by **P. VANMATHI**, M.Sc (Nursing) II year Student, College of Nursing, Madras Medical College, Chennai -03, submitted to The Tamil Nadu Dr.M.G.R. Medical University, Chennai in partial fulfilment of the requirement for the award of the degree of Master of Science in Nursing Branch – IV, Community Health Nursing under our guidance and supervision during academic year 2018 – 2020.

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–Isabella koldras

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ABSTRACT

Adolescents are a large and growing segment of the population. This is a crucial period in the life. Because alteration in the physical and physiological function takes place in the body. In the stage of their life the adolescents should take care of themselves in various aspects like personal hygiene, nutrition, exercise, and periodic health check-ups.

Urinary tract infection (UTI) is a common disease affecting all age groups from neonate to geriatric but it has particular impact on females of all ages especially during adolescent period. Acute uncomplicated Urinary tract infection is more prevalent among adolescent girls and is the fourth main reason for outpatient visit among this group.A short urethra in women is mostly responsible for high incidence of Urinary tract infection among them.

Lack of adequate knowledge and practices may lead to various genitourinary diseases among adolescent girls. Urinary tract infection is a bacterial infection that affects any part of the urinary tract. Nurses being the part of health team have responsibility to educate the adolescent girls and show correct pathway to prevent urinary tract infection.

TITLE

A study to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls at selected government school, Chennai.

OBJECTIVES

To assess the pre test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in

experimental and control group and to evaluate the impact of community health nurse initiated packages on knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental group(post test), To compare the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group, To find out associate between the post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls with their selected demographic variables.

METHODOLOGY

The study was conducted with 60 sample [Adolescent girls] in quantitative approach. Quasi experimental Non Randamoized control group design , sample selection was done by purposive sampling technique method. Pre existing knowledge and practice was assessed by using semi structured questionnaires. After the pre-test, community health nurse initiated packages was given regarding prevention of urinary tract infection among adolescent girls. After 7 days post test was conducted by using tool.

RESULTS

The finding of the study revealed that community health nurse initiated packages had improved the knowledge and practice regarding prevention of urinary tract infection among adolescent girls with paired t test, $p< 0.05$. There is statistically significance in knowledge and practice attainment on regarding prevention of urinary tract infection show impact of community health nurse initiated packages.

CONCLUSION

The conclusion of study shows that community health nurse initiated packages was effective in improving knowledge and practice regarding prevention of urinary tract infection among adolescent girls.

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LIST OF ABBREVIATTION

ABBREVIATION	EXPANSION
CI	Confidence interval
DF	Degree of freedom
Fig	Figure
H1 and H2	Research hypothesis
SD	Standard Deviation
P	Significance
X2	Chi square test
WHO	World Health Organization
UTI	Urinary Tract Infection
STI	Sexually Transmitted Infection

CHAPTER-I
INTRODUCTION

"The one exclusive sign of thorough knowledge is the power of teaching."

– Aristotle

Adolescents are a large and growing segment of the population. This is a crucial period in the life. Because alteration in the physical and physiological function takes place in the body. In the stage of their life the adolescents should take care of themselves in various aspects like personal hygiene, nutrition, exercise, and periodic health check-ups.

World health organization *(WHO)* describes adolescence as the period in human growth and development that occurs after childhood and before adulthood, from ages 10 to19.

Krishna Chandra Choudhary (2016) stated that India has 253 million adolescents spanning the ages between 10 and 19 yrs as per census 2011.Adolescents in India, account for more than one fifth of the total population (20.9%).

Urinary tract infection (UTI) is a common disease affecting all age groups from neonate to geriatric but it has particular impact on females of all ages especially during adolescent period. Acute uncomplicated UTI is more prevalent among adolescent girls and is the fourth main reason for outpatient visit among this group. A short urethra in women is mostly responsible for high incidence of UTI among them.

Lack of adequate knowledge may lead to various genitourinary diseases among adolescent girls.urinary tract infection is a bacterial infection that affects any part of the urinary tract.

Urinary tract infection usually develops in the lower urinary tract (urethra and bladder) and if not properly treated or untreated they

ascend to the upper urinary tract (ureters and kidneys) and also cause severe damage to the kidneys. Other complications caused by UTIs are bladder infection(cystitis), urethral infection(urethritis), kidney infection(pyelonephritis) and infection of the ureter(ureteritis)

Infection of the urinary tract could manifest differently depending on the site of the infection and length of time involved, those that affect the lower urinary tract are called the cystitis- involving the bladder alone with symptoms including painful urination, burning sensation, either frequent or urge to urinate (or both) while those that affect upper urinary tract are the pyelo nephritis involving the kidney and other organs. The common complaints of the upper urinary tract infection are fever and flank pain while urination.

Preventing urinary tract infection is the most effective way of reducing the adverse consequences. Preventing the spread of genitourinary infection requires that females at risk for acquiring infection must change their hygienic practices and behaviors Prevention and management of urinary tract infection which includes; improving knowledge of urinary tract physiology, reasons of genitourinary infection, complication, and proper health habits like good personnel hygiene, drinking plenty of water which flush out the bacteria out of the urinary tract, empting bladder completely as soon as feel the urge or at least once in three hours, helps to keep bacteria down, front to back wash, wear cotton underwear which does not trap moisture and proper perineal hygiene with changing sanitary pads and tampons frequently during menstruation.

BACKGROUND OF THE STUDY

The word ‘adolescence’ is a Latin word derived from ‘adolescere’ which means to ‘grow into adulthood’. Acute uncomplicated Urinary

Tract Infectiosn is more common in adolescent age group people, and more prevalent in girls than boys.

In USA urinary tract infection causes one million hospital admissions per year. 1% of school girls in the age group of (5-14 years) have bacteriuria which increases up to 4% in young adulthood and then by additional 1-2% with every decade of age. Young women have 30 times more prevalence than that of young men.

A study conducted among 1817 school going children aged 11-15 years in Mangalore district shows that 192 (10.57%) children were affected with symptomatic bacterial infection in which 53 (27.6%) were boys 139(72.4%) were girls. The main organism isolated was E.coli. There was a gradual increase in incidence of asymptomatic bacteriuria in girls from 11 years (7.5%) to 15 years (13.66%) of age. The study result reveals that while age increases incidence rate of urinary tract infection also increases.

A syndromic approach conducted among 134 females adolescent aged 10-19 years in Howrach district to determine reproductive tract infection shows that 64.01% were suffering with reproductive tract infection, 3.82% with urinary tract infection and 15.92% with dysmenorrhea. It is found that there was no significant association between reproductive tract infection and religion and higher prevalence rates were found in family size of 7.

A Dutch National Survey of general practice to find the incidence rates and management of urinary tract infection among 82,053 children aged 0-18 year's shows that 1.15% were diagnosed as having urinary tract infection and the incidence rates were 19 episodes per 1000 persons per year. Incidence rate in girls were 8 times higher than boys which gradually increased after the age of 12 years. Smaller cities and rural areas had the incidence rate 2 times as high as in the three largest

cities. The incidence rate was lowest in summer times among children below 12 year's.

Different medical and nursing text books have mentioned that the urination habits, clothing, diet, menstrual protection and sexual intercourse are the risk factors for the urinary tract infection in women. But sound studies related to these aspects are few.

Personal experience of the investigator and review of literature revealed that lack of adequate knowledge and hygienic practices are most common causes for urinary tract infection among adolescent girls. Nurses being the part of health team have responsibility to educate the adolescent girls and show correct pathway to prevent urinary tract infection. Hence, the above-mentioned factors motivated the investigator to undertake the study.

1.1 NEED FOR THE STUDY

"An ounce of prevention is worth of a pound of care"

Adolescents from a large section of population of India, about 22.5% adolescent girls have to be focused more as it is a period of rapid physical growth, sexual , physiological, psychological changes. Habits and behavior picked up during adolescence have life long impact.

Urinary Tract Infection is the most common bacterial infections seen in primary care, next to respiratory tract infections.61% of all Urinary Tract Infection are managed in the primary care settings.It has been estimated globally that result in as many as 8.3 million visits to outpatient clinics, 1 million visits to emergency department, and 100000 hospitalization annually.

Urinary tract infection is the common urologic disorder in children.Urinary tract infection may involve the urethra , bladder, and

/or the ureters, renal pelvis, calyces, renal parenchyma. It is estimated that 150 million urinary tract infections occur yearly on a global basis.

Boys are at greater risk for urinary tract infections on the first few months of life, but the risk decreases significantly after 2 years of age.Girls are at more risk as a result of variety of factors such as the close proximity of female urethral meatus to the anus, and incomplete,short urethra , inco-ordinate voiding in school going girls which is often associated with constipation and encourages infection in the urinary tract the risk steadily decline as they cross childhood but the risk of non febrile infection and uncomplicated Urinary Tract Infection is more common during adolescent period. As many children are affected with urinary tract infection in all parts of the world.

In India , the National family health survey reported the prevalence of urinary tract infection among adolescent girls(10-19) years as 16.6% and the risk of bacteremia developing in adolescent girls as 5-10%.The common risk factors are adolescent Urinary Tract Infection are poor hygiene, dysfunctional voiding pattern, use of synthetic underwear, and panty hose, tight jeans, wet bathing suits, allergens/ irritants , famine hygiene sprays, bubble baths, performed toilet paper , sanitary napkins and soaps may development of cystitis.

The chances of women suffering from Urinary Tract Infection are 50% more than men. The prevalence of Urinary Tract Infection is more common in females because the sources of bacterial infection like the vagina and anus are positioned close to the urinary opening. Preventive measures of Urinary Tract Infection are maintaining personal hygiene, empty the bladder as soon you feel the urge to urinate, always keep bottom clean and dry after bowel movement and after urinating, keep vagina clean, wash it with mild soap every day. Wear cotton panties as they do not trap the moisture can dry easily. Drinking plenty of water

since it helps to push down all the toxins from the body through urine, eat lots of fruits which is rich in Vitamin C, as it helps in making urine acidic and also helps to reduce the number of harmful bacteria in the urinary tract.

A cross-sectional study was carried out among 181 adolescent and preadolescent girls aged between 10-19 years in the rural district of Karimnagar, AP on urinary tract infections among adolescents. A pre-designed, structured interview-based questionnaire was used which contained questions related to puberty, hygiene and urinary tract infection. There was significant association between prevalence of Urinary Tract Infection and improper perineal washing technique (CI = 95%, $P<0.001$), malnutrition (CI=95%, $P<0.001$), presence of vaginal discharge (CI=95%, $P<0.001$) and use of sanitary pads during menses (CI=95%, $P<0.001$). The researcher concluded that misconceptions included not taking bath during periods and not eating certain foods. Low socioeconomic status was chiefly responsible for frequent use of same piece of cloth as sanitary pads during menstrual bleeding leading to urinary tract infection.

Silent urinary tract infection may occur among school girls which is due to inadequate intake of water and infrequent passage of urine. The main reason for this is unhygienic school toilets and improper teaching regarding menstrual hygiene. Dehydration can cause urinary tract infection.

A case control study conducted among the students aged 16-39 years, of the University of California at Los Angels. Using questionnaire collected the data and found that 19 of the 44 cases had prior urinary tract infection. There was strong positive association between having urinary tract infection, consumption of tea and cola soft drinks, but a slight to moderate association with cranberry juice, vitamin c, soda pop,

orange juice and citrus juice, coffee and milk. Negative association with vegetarian diet, garlic, ginger, chili peppers and alcoholic beverages. Moderately positive association between primary urinary tract infection and using tampons sanitary napkins with deodorant and non-deodorant. Slight association using bubble bath and spermicide foam. Cotton panties showed a strong positive association and wearing synthetic panties a mild positive association with secondary urinary tract infection. Wearing tight jeans as compare to loose and very loose one was strongly associated with primary urinary tract infection and moderately with secondary urinary tract infection.80% of UTI in adults are due to E-coli which present around the anus or vagina, which may enter into the urethra while wiping from back to front.

Urinary tract infection may progress into renal damage, renal failure, and sepsis, infertility ,cervical cancer. Early recognition and prompt treatment help to prevent occurrence of recurrent urinary tract infection and possibility of complication.

From the above studies the researcher has come to know that adolescent girls are at high risk for urinary tract infection and do not maintain their personal hygiene. The researcher also found from the literature that adolescent girls are more prone to get urinary tract infection.

Early identification of the disease by proper diagnostic measures and management will help to prevent the complications of the Urinary Tract Infections. Preventive measures like, intake of more amount of water and maintenance of good hygienic measures especially during menstruation etc.,also will help to reduce the incidence of Urinary Tract Infections.Hence the researcher was motivated to conduct a study to find out the knowledge and practice of adolescent girls on urinary tract infection by providing a informational handout,poster presentation.

1.2 STATEMENT OF THE PROBLEM

"A study to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls at selected Government school, Chennai".

1.3 OBJECTIVES

- To assess the pre test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group
- To evaluate the impact of community health nurse initiated packages on knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental group
- To compare the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group
- To find out associate between the post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls and their selected demographic variables.

1.4 OPERATIONAL DEFINITIONS:

Assess

It refers to measuring the knowledge and practices of adolescent girls regarding prevention of urinary tract infection.

Impact

It refers to the level of post test knowledge and practices after the intervention of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls

Community Health Nurse Initiated Packages on Prevention of Urinary Tract Infection

It refers to the action of beginning something by community health nurse regarding prevention of urinary tract infection. In this packages includes what is the anatomy and physiology of urinary tract and what is Urinary Tract Infection, causes, risk factors, signs and symptoms and diagnostic evaluation, preventive measures and complication of Urinary Tract Infection.

Adolescent Girls

It refers age between the 13-16 years of girls.

1.5 RESEARCH HYPOTHESIS

H1- There will be a significant difference between pre test and post test knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group

H2- There will be a significant association between the post test level of knowledge and practices among adolescent girls regarding urinary tract infection and their selected demographic variables.

1.6 ASSUMPTION

Adolescent girls may have verifying the level of knowledge and practices regarding prevention of urinary tract infection in experimental and control group.

Providing community health nurse initiated packages may help to enhance knowledge and practices of prevention of urinary tract infection among adolescent girls in experimental group.

1.7 DELIMITATION

The study is limited to only among urban area school going adolescent girls.

The study duration limited to 4 weeks only.

The sample size is limited to 60 adolescent girls.

1.8. CONCEPTUAL FRAME WORK

The study is based on the concept of community health nurse initiated packages on prevention of urinary tract infection. The Theory(1964) as a base for developing the conceptual framework. Ernestin Widenbach proposes helping the art of clinical nursing theory in 1964 for nursing which describes a desired situation and way to attain it. It directs action towards the explicit goal.

This theory has three factors

1. Central purpose

2. Prescription

3. Realities

1. Central Purpose

It refers to what the nurse want to accomplish. It is the overall goal towards which is a nurse strives.

2. Prescription

It refers to the plan of care for patients. It will specify the natures of action that will fulfill the nurses central purpose.

3. Realities

It refers to the physical, physiological, emotional and spiritual factors that come in to play in situation involving nursing action. The five realties identified by Widenbach's are agent, recipient,goal, means and framework.

The conceptual frame work of the nursing practice according to this theory consists of three steps as follows.

Step-1: Identifying the need for help.

Step-2: Ministering the needed help.

Step-3: Validating that the need for help was met.

Step I: Identifying the need for help

This step involves determining the need for help. Adolescent school girls were identified based on demographic variables (Age, Sex, Education, Occupation, Family Income, Religion, type of family, knowledge by hygiene practices) inclusive and exclusive criteria, purposive sampling technique was used to assign the adolescents in experimental and control group.

Step II: Ministering the needed help

Community health nurse initiated packages on prevention of urinary tract infection was given to experimental group daily in the morning /evening with using handout and posters for 7 days.

Agent : Investigator

Recipient : Adolescent school girls(13-16 years)

Goal : Improve the knowledge and practices on prevention of urinary tract infection

Means : Hand out and poster presentation related to urinary tract infection and its prevention.

Framework : Chennai Girls Higher Secondary School,Choolai Chennai.

Step III : Validating that need for help was met.

It is accomplished by means of post test knowledge and practices of urinary tract infection .It is followed by an analysis of the findings.

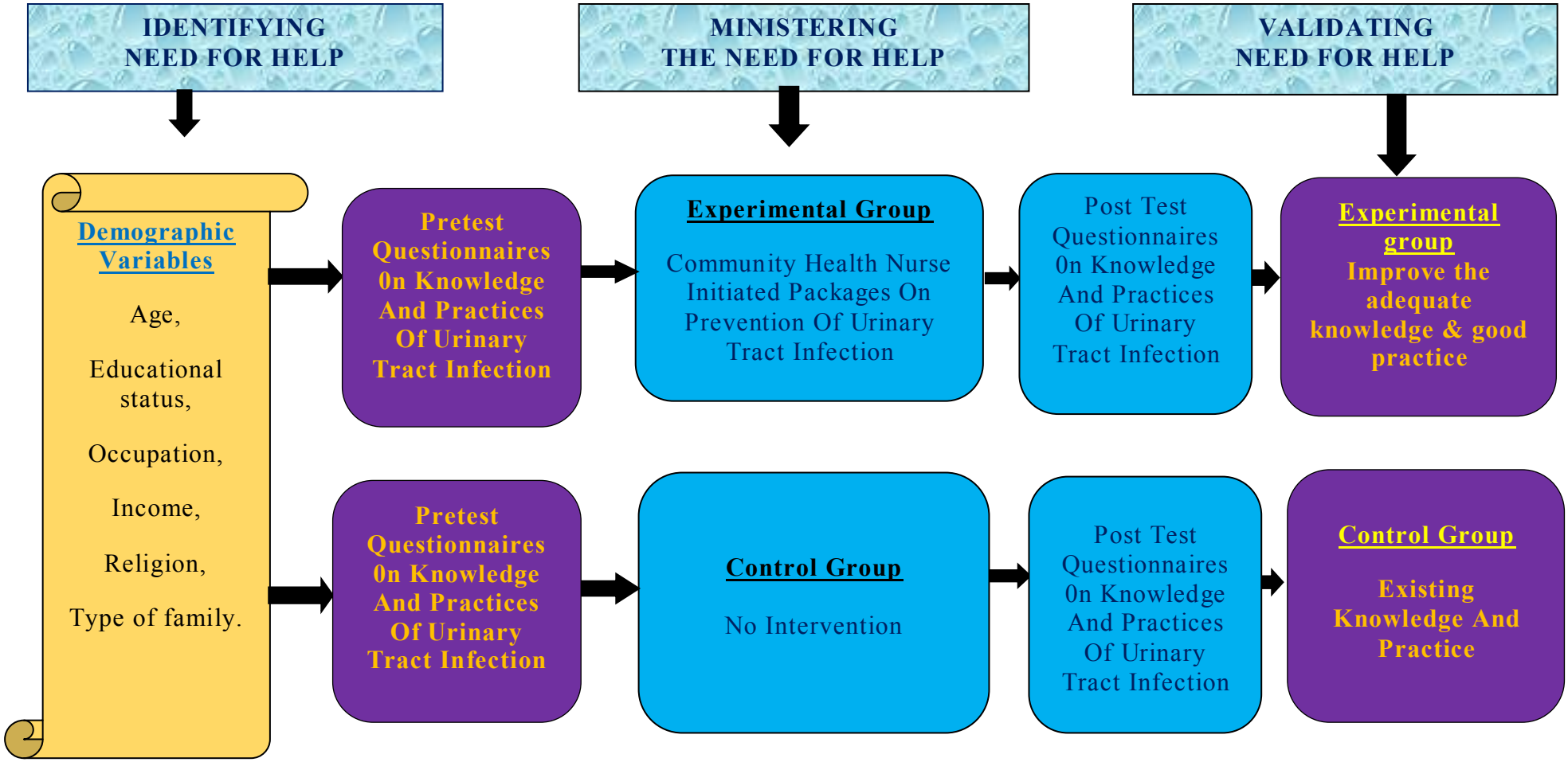


FIG.1.8.MODIFIED MODEL OF WIEDENBACH'S HELPING ART OF CLINICAL NURSING THEORY(1964)

CHAPTER-II
REVIEW OF LITERATURE

This chapter deal with review of literature related to health consequences and prevention of urinary tract infection.

2.1 LITERATURE REVIEW RELATED TO THE STUDY

Review of literature is a summary of the study conducted previously study topic. The review of literature is defined as a broad, comprehensive in depth, systematic and critical review of scholarly publication, unpublished scholarly print materials, audiovisual materials and personal communication.

IN THIS STUDY, REVIEW OF LITERATURE WERE CLASSIFIED

2.1.1. Literature related to prevalence and incidence of urinary tract infection

2.1.2. Literature related to causes and risk factors of urinary tract infection

2.1.3. Literature related to preventive measures of urinary tract infection among adolescent girls

2.2.1.LITERATURE RELATED TO PREVALENCE AND INCIDENCE OF URINARY TRACT INFECTION

Samuel N. Uwaezuoke et al (2019) was conducted a prospective cross sectional study on prevalence of UTI among adolescent female. The study sample size is 211 adolescent girls aged between 13 to 21 years. The result revealed that 120 sample (57%) had UTI. In which 107 (69%) had culture conformed UTI, remaining 13 were under diagnosed. This 13 people had a co-infection with STIs and UTI. The researcher

concluded that adolescent girls presenting with urinary symptoms should be tested for STIs and UTI to ensure timely diagnosis and treatment

Martin Odoki et al (2018) was conducted a study was carried out to determine the prevalence of urinary tract infection and the effect of age and gender on its prevalence as well as the etiologic agents. Clean-catch midstream urine was collected from 514 patients (49 males and 465 females). The result of the study showed that the prevalence of urinary tract infection was significantly higher in females compared to males (female vs. male: 42.80% vs. 10.20%; OR = 6.583. 95%, CI = 2.563, 16.909; P < 0.0001). Age had no effect on the prevalence of UTI. Escherichia coli was the most prevalent isolate generally and in females, while Staphylococcus aureus was the predominant isolate causing urinary tract infection in males. An overall prevalence of 39.69% was observed in this study. The study concluded that the females had a 3 to 17 fold increase risk of acquiring UTI. So the female group should be educated on preventive measures of UTI

Megan A Moreno (2016) conducted a study related incidence of urinary tract infection among adolescent girls. The study revealed that Girls as well as young women are particularly susceptible to UTIs because their urethras are shorter so germs from the bowel can pass along this route to the bladder. To prevent UTIs, girls should always wipe from front to back with toilet paper after bowel movements. Adolescent females who are menstruating should change tampons and sanitary napkins frequently. Since bubble baths and perfumed soaps can irritate the genitals and urethra, girls should avoid contact with these substances. Some foods and beverages can cause bladder irritation such as colas, caffeinated drinks, chocolate, and some spices. If your child has any of the symptoms of a UTI listed above, contact your physician.

Raya Mohammad Hussein Sawalha (2013) was conducted a cross-sectional study on the prevalence of urinary tract infection in Nablus. The sample selected for the study was 1462 children in the age group from 12-18 years. Data collection method was by using questionnaire and urine testing (urinalysis and urine culture). The study result showed that there was four percent prevalence of urinary tract infection, in that 7.5 percent among girls and zero percent among boys. The urinary tract infection is statistically associated with the following variables: gender (p=0.0001), fever (p=0.012), burning sensation while urination (p=0.0001), nocturnal enuresis (p=0.035), and hygienic use of toilets (p=0.046). The researcher concluded that students in schools must be educated on how to use the toilets by themselves in a safe and hygienic way and hence the study recommends more health promotion programs that are needed to be implemented at schools to increase the awareness of students about hygienic practices

S.M.Ahmed et al (2013) was conducted a cross-sectional study on the prevalence of urinary tract infection in the rural district of Karimnagar, Andhra Pradesh. Sample selected for the study was 181 adolescent girls. Data collection was done by using structured interview related to puberty, hygiene and urinary tract infection. The study results shows that there was a strong and significant association between prevalence of urinary tract infection and improper perineal washing technique (8.3%, CI=95%, p<0.001), malnutrition (7.7%, Cl=95%, p<0.001), presence of vaginal discharge (7.7%, CI=95%, p<0.001), and use of sanitary pads during menses (9.9%, Cl=95%, p<0.001). Overall prevalence of urinary tract infection among adolescent girls was 12.7 percents. This study shows that adolescent girl had less knowledge regarding personal hygiene and nutrition. The researcher recommended the need to give health education about the causes, prevention, and treatment of urinary tract infection among adolescent girls

Honey RJ et al (2013) was conducted a prospective survey on incidence of urinary tract infection and causative organism. A total of 11,308 urine sample were collected from the patients and analyzed for UTI. The results revealed that there was the incidence of 1,020 of UTI out of 11,308 urine sample. A causative organism identified from collected urine sample was E. coli with 620 cases, Klebsiella pneumonia with 115 cases, staphylococcus aureus with 175 cases, Cocci Entercoccus with 110 cases. Out of 1,020 patients 227 were male and 793 were female. The study concluded that as a female are highly exposed to UTI than males. So the action towards prevention can be focused on female population

2.1.2. STUDIES RELATED TO CAUSES AND RISK FACTORS OF URINARY TRACT INFECTION

Oscar Storme et al (2019) was conducted a study is risk factors and predisposing condition for urinary tract infection on 285 female adolescent college students with first urinary tract infection for 6 months or until the second urinary tract infection in the university of Michigan Health Service and university of Texas. The researcher found that the first urinary tract infection is due to Escherichia Coli was followed by second urinary tract infection three times more often than was a non- E –coli first urinary tract infection . Vaginal intercourse increase the risk of a second urinary tract infection , condom use decrease the risk of a second urinary tract infection caused by a different uropathogen and type of treatment was not associated with second urinary tract infection .Although the risk of second urinary tract infection is strongly influenced by sexual behavior ,woman with a first urinary tract infection cause by E-coli are more likely than are those with non E –coli first urinary tract infection to have second urinary tract infection within six months.

Hanna Janoowalla et al (2019) was conducted interventional prospective cohort study a 4 schools in the western province of Rwanda among 240 adolescent participants.Despite not finding any difference in rates of UTI, the present study showed a decreased rate of vulvovaginal symptoms in users of menstrual pads.

Shubha shrivastava (2018) conducted a study in the Gynaecology OPD at a private clinic in Bhopal, Madhya Pradesh to evaluate UTI. A analytical study is done among the samples of 25 adolescent girls between the age of 10-19 years.The results revealed that inadequate water intake , holding urine in long duration , poor menstrual , sexual hygiene were the important etiological factors to cause the urinary treat infection among adolescent girls .

K.K.Lamiya et al (2018) A cross-sectional study was conducted among 110 school going girl students aged 10–13 years to assess water intake and burden of urinary tract infection among school girls. The study found 30.9% of the study population had UTI. Only 12.7% had adequate daily water consumption and 71.8 % were not having adequate water intake during school hours. The main reason for inadequate intake was reported as lack of awareness of adequate amount. A significant association was noted between UTI and poor menstrual hygiene, use of school toilets as well as the previous history of UTI.

Rhaiana Gondim et al (2018) was conducted cross sectional study of 326 children and adolescents diagnosed with urinary urgency . These results show that being female and infrequent voiding constituted significant risk factors for a diagnosis of febrile UTI in these children. These result shows that girls are more prone to get UTI when compared to boys.

Chinmayee Barthakur et al (2017) conducted a community based cross sectional to assess reproductive health problems among 119

adolescent girls(10-19 years) living in slums of Guwahati city and to assess menstrual hygiene practice among them. Out of 119 adolescent girls 57.1% and 42.9% belong to 1014 years and 15-19 years respectively. Overall 67.2% girls attained menarche. Majority 52.5% used sanitary pads during menstruation. Of the 119 girls, 20.2%, 24.4% and 9.2% presented with symptoms for RTI, UTI and for both RTI and UTI combined. Girls reported problems like dysmenorrhoea, UTI symptoms, and excessive vaginal discharge.

Annuli S .John et al (2016) was conducted study a review on the prevalence and predisposing factors responsible for urinary tract infection among adults. The study result revealed that some of the risk factors responsible for his high prevalence is due to menopause, poor personal hygiene, pregnancy and close anatomical relationship of the female urethra and the anus. Among the uropthogens involved in his infection, entrobacteriaceae especially the E.coli is usually the most prevalent and accounts 80-85% of the total isolate.

Tero Kontiokari et al (2013) was conducted a case control study regarding dietary factors protecting women from UTI, among 139 women in Oulu university of Hospital, with mean age of 30.5 ± 10.5 years. A questionnaire was used to collect the data regarding women's dietary and life style habits. The result showed that increased consumption of fresh fruit or berry juice reduces the risk for UTI.

Tazebew Emiru et al (2013) was conducted a case control study to evaluate the association between UTI and the most common risk factors. 225 samples were selected for this study. The result revealed that using tempon and drinking soft drink is moderately associated (RR ≥ 1.4) with initial and recurrent UTI. Other habits such as urination habit, diet, clothing and soaps had only small association with UTI. Several of this behavior together might increase the risk of UTI. The

researcher concluded that by educating the adolescent group regarding prevention of risk factors may help to reduce the UTI incidence

Arne soraas, Arnfinn sundsfjord et al (2013) was conducted case control study on riskfactors for community acquired urinary tract infection caused by ESBL-producing Enterobacteriae in a low prevalence country, Estern Norway.The study population comprised 100 cases and 190 controls with CA-UTI caused by ESBL -producing and non-ESBL producing E.coli and K.pneumoniae respectively.In conclusion, we have identified riskfactors that elucidate mechanisms and routes for dissemination of ESBL-producing Enterobacteriae in low prevalence country, which can be used to guide appropriate treatment of CA-UTI and targeted infection control measures.

Therese Mahon and Sue CaVill (2012) mentioned that majority of urinary tract infections (UTIs) are caused by Escherichia coli infections often introduced into the urethra from the rectum. Sexually active women are mostly at risk, although infections can occur in other groups. Signs and symptoms include, burning sensation or pain when passing urine, urge to urinate frequently and raised temperature. There is no vaginal discharge. Lower urinary tract infections can cause blood in urine and an inability to urinate despite the urge.

Ljiljana Markovic et al (2011) was conducted a case control study was nested within prospective cohort Hospital acquired urinary tract infection (HAUTI) , on six wards of a general regional hospital in Serbia. Three controls were identified for each patient with HAUTI, being chronologically the next 3 patients surveyed who didn't develop HAUTI. Assessment of 8,467 patients during the study period revealed HAUTI in 125 (116 symptomatic and 9 asymptomatic). The most frequently isolated gram negative bacteria were Enterobacter, klebsiella

Sp., proteus mirabilis and Escherichia Coli, Enterococcus Sp was the most frequent gram positive bacteria.

Ahmed and Avasarala (2008) conducted a cross sectional study on Urinary Tract Infection among adolescent and preadolescent girls (10-19 yrs) in the rural district Karimnagar, erstwhile AP. Total sample size was 181. A predesigned, structured interview based questionnaire was used which contained question related to puberty, hygiene and urinary tract infection. The findings revealed that there was a significant association between prevalence of UTI and improper perineal washing technique ($p<0.001$), malnutrition ($p<0.001$), presence of vaginal discharge ($p<0.001$) and use of unsanitary pads during menses ($p<0.001$). Prevalence of UTI was found to be more (9.9%) in girls who had attained menarche than those who hadn't (2.8%). ($p<0.05$). Girls practicing improper perineal washing technique suffered more (8.3%) from urinary tract infection than those who didn't (4.4%). ($p<0.05$). Significantly more (7.7%) girls having symptoms of vaginal discharge were suffering from urinary tract infection than those who didn't. ($p<0.001$). More girls (3.87%) having pinworms in stool complained of symptoms of urinary tract infection than those who hadn't. ($p<0.001$). UTI is significantly present in the girls who had attained menarche but not practicing proper perineal hygiene.

2.1.3.STUDIES RELATED ABOUT PREVENTIVE MEASURES OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS

Zahra Ahmadi et al (2020) was conducted randamoized control trials to assess the effect of educational intervention program on promoting preventive behaviors of urinary tract infection in girls among 100 mothers of children. The study conclude that TPB –based education with active and interventional follow-up was effective in promoting the preventive behaviors of urinary tract infection.

Naval Heydari et al (2019) conducted a quasi-experimental was conducted on 168 high school female adolescents.The intervention consisted of six-hour training classes over 4 sessions for the teens. Before the intervention, neither control nor intervention groups had differences in 4 domains of behavioral score and total score, but after intervention , the mean scores in all areas were significantly increased. Considering the positive impact of education on health behaviors of adolescents, the use of this method is useful to change their behaviors in the prevention of urinary tract infection.

Mafuyai et al (2019) Conducted a descriptive survey design was adopted. A sample size was 185 respondents and structured questionnaire was used as an instrument for data collection. The findings of the study revealed that majority (82.2%) of the respondents have a knowledge about urinary tract infection. They are also aware that cleaning the perineum from front to back, keeping the genital area clean and dry, avoiding fluids that irritate the bladder such as alcohol and emptying the bladder frequently when full helps in the prevention of urinary tract infection. However, most of the respondents have never experienced urinary tract infection. It was concluded that health care professionals and facilities have the mandate of disseminating information about urinary tract infection to individuals especially females so that they will be aware of the causes, risk factors, symptoms and prevention practices of the infection.

T.Srikala Prasad et al (2019) was conducted on prevalence of urinary tract infection among school going adolescent girls in rural part of Chennai. The observational study was done 200 adolescent girls. The study revealed that, UTI was more (7.7%) in malnourished girls than in those with normal nutritional status. Significantly more (7.7%) girls having symptoms of vaginal discharge were suffering from a urinary infection. For the short term, the need is to give immediate health

education about the causes, prevention, and treatment of UTI among adolescent girls of both the villages and treatment of the identified cases with the urinary antibiotics etc. Long term measures include a periodical screening of the adolescent girls for UTI.

Nimmy Saji et al (2018) conducted was pre experimental one group pre-test post-test design on examines the effectiveness of structured teaching program on prevention of UTI among 60 adolescent girls(13-19 years) at MIMS College of Nursing Puthukode. In pretest score, about 25% of samples had good knowledge in pretest, 71.6% had average knowledge and 3.3% had poor knowledge. After teaching program (posttest) 85% had good knowledge and 15% had average knowledge. There is no significant association between knowledge regarding prevention of UTI and demographic variables. As it is a problem focused among the adolescent girls might support to reduce the occurrence of UTI.

Anjaly Vijayan et al (2018) was conducted a community based interventional study on knowledge, attitude & practice towards urinary tract infection among 467 adolescent girls students in selected girls schools in chitradurga city. The results implicated that out of 467 adolescent girls enrolled in the study, mean score regarding the knowledge on UTI in pre-test 4.78(±1.6) had increased to 10.87(±1.301) in post-test after intervention. Also 10th grade students (4.94(±1.89)) had higher level of knowledge than other grades. It was also observed that majority of the students were following unhealthy practices like drying the clothes under fan(21.17%), keeping the same napkin for long hours(76.75%) , improper perineal washing(97.29%), lack of menstrual hygienity, use of unsanitary napkins(5.99%) etc. After intervention they started following hygienic practices. Conclusion: The study has shown a prompt result in improving the knowledge through KAP. This signifies the need and importance of implementing various teaching programs for

adolescent girls on various topics as it would help to improve knowledge and follow healthy practices to build a healthy nation.

Rakhi Gaur (2018) conducted a true experimental design was to evaluate the effectiveness planned teaching programme on knowledge and practice regarding prevention of UTI among 100 adolescent girls at selected school in Udaipur(Rajasthan). The findings reveal that majority of adolescent girls (49%) belonged to the age group of 15-16 years and were Hindu (50%). The mean pre-test knowledge score was in experimental group 12.04±3.29 and control group11.38±3.28 respectively while the mean pre-test practice score was in experimental group 12.94±2.85 and control group11.82±2.48 respectively. The level of knowledge and practice regarding prevention of UTI of subjects who were exposed to PTP was significantly better than that of the control group at 0.05 level of significance. However, there is positive correlation between pretest knowledge and practice scores of adolescent girls in both groups. Pretest level of knowledge of adolescent girls and place of residence whereas, practice and educational status of parents was significantly associated. The results of the study concluded that the knowledge and practice of adolescent girls could be improved by providing PTP.

Bokolia.R (2016) conducted a descriptive study was evaluate the insight about the knowledge of UTI among school going adolescent girls.The study was done with 307 females aged between the(12-16 years)of school going adolescent girls.The result revealed that, out of 107 school going adolescent girls, 202(65.79%) had no knowledge and 105(34.21%) due to history had knowledge.The questions concerning hygiene, it was discussed that out of total assessed population 121(39.41%) wash their vaginal area after urination, where as 186(60.58%) are not washing , further 270(87.94%) girls change sanitary pads more than 1 time in a day during menstruation ,It is also

found that 156(50.81%) girls consult physician of urinary tract infection symptoms occur.

Kripa,C.K et al (2016) was conducted non experimental descriptive study was carried out to assess the knowledge on prevention of urinary tract infection among 30 adolescent girls in selected nursing college. The present study reveals that out of 30 samples 93% have average knowledge, 7% have inadequate knowledge and no one have adequate knowledge. There is no association between knowledge of prevention of urinary tract infection and selected demographic variables like monthly income, area of residence, type of family, history of urinary tract infection.

Heba Al-Kotb et al (2016) was conducted quasi experimental study on prevention for genitourinary tract infection among 462 female adolescent students in age group(12-15).The study findings reported improvement in habitual hygiene practices after implementation of the program which lead to resuced the complain of symptoms of genitourinary tract infection regarding studied student.

Sonia Rosaline Blanch D'Souza (2016) One group pre-test post-test design was adopted to study the effectiveness of an information booklet on urinary tract infection among 45 adolescent girls at a selected school Udupi. Convenience sampling technique was used to select the sample. The tools of the study included a knowledge questionnaire and background information. The findings of the study revealed that the mean post-test knowledge score (28.31) was higher than the mean pre-test knowledge score (15.35). The 't' test computed between pre-test and post-test showed that there was significant difference in the pre-test and post-test knowledge score (t_{44}=33.40, P<0.05). The researcher concluded that there was significant gain in knowledge after the introduction of the information booklet.

Akshara.P.I et al (2016) conducted a descriptive study to assess the knowledge regarding urinary tract infection among 60 adolescent girls(16-17 years) of Karthika Thirunal Govt. Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram. Analysis reveals that 40% adolescent girls have poor knowledge, 35% have average knowledge and 25% have good knowledge regarding urinary tract infection. On analysis of data there is a significant statistical relationship between the level of knowledge and selected demographic variables such as age, area of residence, socio economic status, voiding during school hours and cleanliness of toilets in schools. But there is no statistical relationship between education of mother and sources of information.

Indhmol TD et al (2014) conducted a study to effectiveness of structured teaching programme on knowledge regarding prevention iof urinary tract infection among 119 adolescent girls (experimental 56 and control 63) using quantitative pre test and post test control group design . This study results showed statistically significant different in gain in knowledge regarding prevention of urinary tract infection in experimental group who had attended structured teaching program (T_{117}=4.973 , $p<0.0001$) and hygienic practice during menstruation were the main contributing factors identified in the study population.

CHAPTER – III
RESEARCH METHODOLOGY

The chapter deal with the description of the methods and different steps used for collecting and organizing data, such as the research approach, research design, variables, setting of study, population, sample, sample size, sampling technique, criteria for sample selection, developing and description of the tool, ethical consideration, content validity, pilot study, reliability, data collection procedures and plan for data analysis.

3.1 RESEARCH APPRAOCH

A research approach guide the researcher in the natures of the data to be collected and the method of analysis. To accomplish the objectives of the current study quantitative research approach was chosen by investigator.

3.2 RESEARCH DESIGN

The research design selected for this study is quasi experimental non randamoised control group design which is represented below.

NON RANDAMOISED CONTROL GROUP DESIGN

Group	Pre test	Intervention	Post test
Experimental group	O1	X	O2
Control group	O3	-	O4

The symbols used:

O1 & O3 - Collection of demographic data, pre test to assess the level of Knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group.

X - provide the community health nurse initiated packages on prevention of urinary tract infection in experimental group

O2 & O4 - Post test to assess the level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental group and control group.

3.3 SETTINGS OF THE STUDY

The study was conducted in Chennai Girls Higher Secondary School, Rotlers Street, Choolai, Chennai-600112. The setting was selected based on the feasibility of conducting the study , availability of sampling and proximity of setting to the investigator.

3.4 DURATION OF THE STUDY

The duration of data collection was from 20.01.2020 to 15.02.2020 (4 weeks).

3.5 STUDY POPULATION

Population is the entire aggregation of cases that meet the designed set of criteria. In this present study population is adolescent girls who are all studying in Chennai girls higher secondary school , choolai,Chennai.

3.5.1 Target population

It includes adolescent girls ranging from 13-16 years in Chennai girls higher secondary school ,choolai,Chennai

3.5.2 Accessible population

The accessible population of the study includes adolescent girls of age 13 – 16 years studying in 8th and 9^{th} standard students of Chennai girls higher secondary school, choolai, Chennai.

3.6.SAMPLE

The sample includes adolescent's girls of age group between 13 years - 16 years studying in 8th and 9th standard students of Chennai girls higher secondary school, choolai, Chennai.

CRITERIA FOR SAMPLE SELECTION:

3.6.1. Inclusion Criteria

- The students those who are in the age group of 13 years - 16years.
- The adolescent girls those who are all studied in selected Government school,Chennai.
- The adolescent girls who are willing to participate
- The adolescent girls who are available at the time of data collection

3.6.2. Exclusion Criteria

- The adolescent girls who are not interested to participate in this study.
- The adolescent girls those who are not present at the time of data collection .

3.7. SAMPLE SIZE

The sample size consists of 60 adolescent school girls studying in 8th and 9th in Chennai girls higher secondary school, choolai, Chennai. In 30 adolescent girls in experimental group and 30 adolescent girls in control group.

3.8.SAMPLING TECHNIQUE

Non probability purposive sampling technique was used to in this study.

3.9. RESEARCH VARIABLES OF THE STUDY

The variables mainly include in this study are independent and dependent variable. dependent variables explained the effect of independent variables.

3.9.1 Independent variables: Community health nurse initiated packages on prevention of urinary tract infection

3.9.2 Dependent variables: knowledge and practices of adolescent girls regarding prevention of urinary tract infection.

3.9.3 Demographic variables: age, educational status, occupation, income, religion, type of family.

3.10. DEVELOPMENT AND DESCRIPTION OF THE TOOL

The tool was developed after an extensive review of literature, internet sources and opinion of the experts in the field, journals and books.

3.10.1.Development of tool

The tool for data collection was formulated by the investigator by following steps.

Literature review: Literature from books, journal, and newspaper articles were reviewed and used to develop the assessment tools.

Expert's opinion: The investigator discussed with the experts in Nursing, statistics and Community medicine department and incorporated their valuable suggestion in the format of the assessment tool.

3.10.2.Description of the tool

The tool consists of two sections. The tool used in this study was a demographic and clinical variables.

SECTION-A

It consist of demographic variables such as age, education of the sample, education status of the mother, occupation status of the mother,occupation status of the father, monthly income of the family, religion, types of family, knowledge of hygiene practices, how many times you had signs and symptoms of urinary tract infection.

SECTION-B

Part-A

It comprised of a semi structured knowledge questionnaire on urinary tract infection. The questionnaire contains 20 multi choice questions. The concept for developing the tool which includes 4 questions related to general information or knowledge, 5 questions related to causes and risk factors of Urinary Tract Infection, 3 questions related to signs and symptoms of Urinary Tract Infection, 6 questions related to prevention of Urinary Tract Infection.

PART-B

It consist of 10 practice questionnaires on urinary tract infection.

Community health nurse initiated packages

Community health nurse initiated packages on prevention of Urinary Tract Infection includes what is the anatomy and physiology of urinary tract and what is Urinary Tract Infection, causes, risk factors, signs and symptoms and diagnostic evaluation , treatment ,preventive measures and complication of Urinary Tract Infection.

3.11.SCORE INTERPRETATION:

PART-A: A semi structured questionnaire was used to assess the knowledge regarding urinary tract infection .Each correct answer was given a score of (1) one and wrong answer was scored as (0) zero.The total knowledge score was 20

PART-B:A semi structured questionnaire was used to assess the practices regarding urinary tract infection .Each correct answer was given a score of (1) one and wrong answer was scored as (0) zero. The total knowledge score was 10

SECTION-B: overall knowledge and practice score was 30.

Score Interpretation

S. No.	Grade	Percentage	Score
1.	Inadequate knowledge	0 – 40%	0.0-8.0
2.	Moderate knowledge	41 – 70%	8.0-14.0
3.	Adequate knowledge	71 – 100 %	15.0- 20.0

S. No.	Grade	Percentage	score
1.	Poor practice	0 – 40%	0.0-4.0
2.	Moderate practice	41 – 70%	4.1-7.0
3.	Good practice	71 – 100 %	7.1 -10.0

3.12. CONTENT VALIDITY

Validity defined as the degree to which an instrument measures what it is supposed to measure. The demographic data with the objective of the study were given to the 4 nursing experts, 1 medical officer and 1 statistician. They have given certain suggestions regarding tool, method of data collection. I have incorporated these suggestions into my study.

3.13. ETHICAL CONSIDERATION:

The study was proposed and submitted to the ethical committee, Madras Medical College, and the committee approved the study. All respondents were carefully informed about the purpose of the study and their part during the study. Informed consent for the study was obtained from all adolescent girls. Confidentiality of the subject's information was maintained. Thus the investigator followed the ethical guidelines, which were issued by the research committee. Necessary permission to conduct the study was requested and obtained from Deputy Commissioner (Education),Chennai. The study was done without any violation of human rights.

HUMAN RIGHTS

- The study was proposed among the experts of the Institutional Ethics Committee , Madras Medical College, Chennai-03 and got the permission to carry out the study.
- The study details was also explained to the Deputy Commissioner (Education),Greater Chennai Corporation to carry out the study in the school coming under the ambit of Chennai and got the permission.
- The content validity was received from the various expert in the community health nursing and community medical experts.

BENEFICIENCE

- Potential benefits and risks were explained to the adolescent girls.

DIGNITY

- Adolescent girls were informed about the study in detail and ensured their participation.

- ❖ Informed consent was obtained from the adolescent girls.
- ❖ Freedom was given to the adolescent girls in opting in the participate to the study or withdrawal from the study.

CONFIDENTIALITY

- ❖ Confidentiality and anomity pledge was ensured. The study adolescent girls were also ensured for maintaining the confidentiality to their details.

JUSTICE

- ❖ The study adolescent girls were treated with justice.
- ❖ The content of the community health nurse initiated packages was also taught to the adolescent girls of the control group through the handouts and posters presentation after the post test.

3.14. RELIABILITY OF THE TOOL

The reliability of the tool was determined by using test retest method. knowledge score reliability correlation value was 0.82 and practice score reliability correlation coefficient value was0.85.These correlation coefficients are very high and it is good tool for assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls at selected government school, Chennai. Hence the tool was considered highly reliable for proceeding with the study.

3.15. PILOT STUDY

The pilot study was conducted in Chennai girls higher secondary school, Rotler street, Chennai , for a period of 7 days. The investigator obtained an oral and written permission from the head mistress in the school and adolescent girls prior to the study.The purpose of the study was explained to the adolescent girls. 6 adolescent girls who met the

inclusion criteria were selected using purposive sampling technique. The first 3 adolescent girls were selected as experimental group and the next 3 s adolescent girls were selected as control group. On first day pre test was done for both control and experimental group by using the semi structured questionnaire. community health nurse initiated packages given with using handouts and posters for experimental group for 7 days under the supervision of the investigator. Post test was conducted for both experimental and control group on 8th day by using the same semi structured questionnaire.Data were analyzed by using descriptive and inferential statistics. The findings revealed that the study is feasible and practicable to conduct the main study.

3.16.DATA COLLECTION PROCEDURE

The plan of data collection for the proposed study is as follows.

The study was conducted in Chennai girls higher secondary school, Choolai, Chennai. It was coming under the ambit of Chennai corporation.Permission obtained from the Institutional Ethics Committee, Formal permission was obtained from the Deputy Commissioner (Education) in Chennai.Samples were drawn using Purposive sampling technique, during the 1st visit, the researcher introduced herself and explained the purpose of the study and confirmed the willingness of the school students to participate in the study by getting consent from them as per the inclusion criteria.Data collection procedure was done for period of four weeks. On first day Pre test was done using semi structured questionnaire in Experimental and Control group. Based on the criteria 10 subjects were selected each day, 5 in experimental group,5 in control group. Subsequently community health nurse initiated packages was given on for 30 minutes in experimental group with using handouts and posters. Post test was conducted for both experimental and control group on 7th day by using the same semi structured questionnaire.

Table-3.1: Intervention Protocol

S. No	Protocol	Experimental group	Control group
1	Place	Chennai Girls Higher Secondary School, Choolai, Chennai.	Chennai Girls Higher Secondary School, Choolai, Chennai.
2	Intervention	Community health nurse initiated packages	-
3	Duration	4 weeks	4 weeks
4	Frequency	Morning / Evening	-
5	Time	45 mins	-
6	Mode of teaching	Community health nurse initiated packages on prevention of urinary tract infection with using handouts, poster presentation.	No Intervention
7	Administrator	Investigator	Investigator
8	Recipient	School students of age group13-16 years	School students of age group13-16 years

3.17. DATA ENTRY AND DATA ANALYSIS:

Data entry

Entered the data into the excel sheet and coding the data into SPSS statistical packages system.

Data analysis

The collected data were analyzed by using descriptive and inferential statistics.

3.17.1.Descriptive analysis

Frequency percentage was used to describe the demographic variables of adolescent girls in experimental and control group.

Mean, Standard deviation was used to assess the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group.

3.17.2.Inferential statistics

Paired't' test was used to compare the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls.

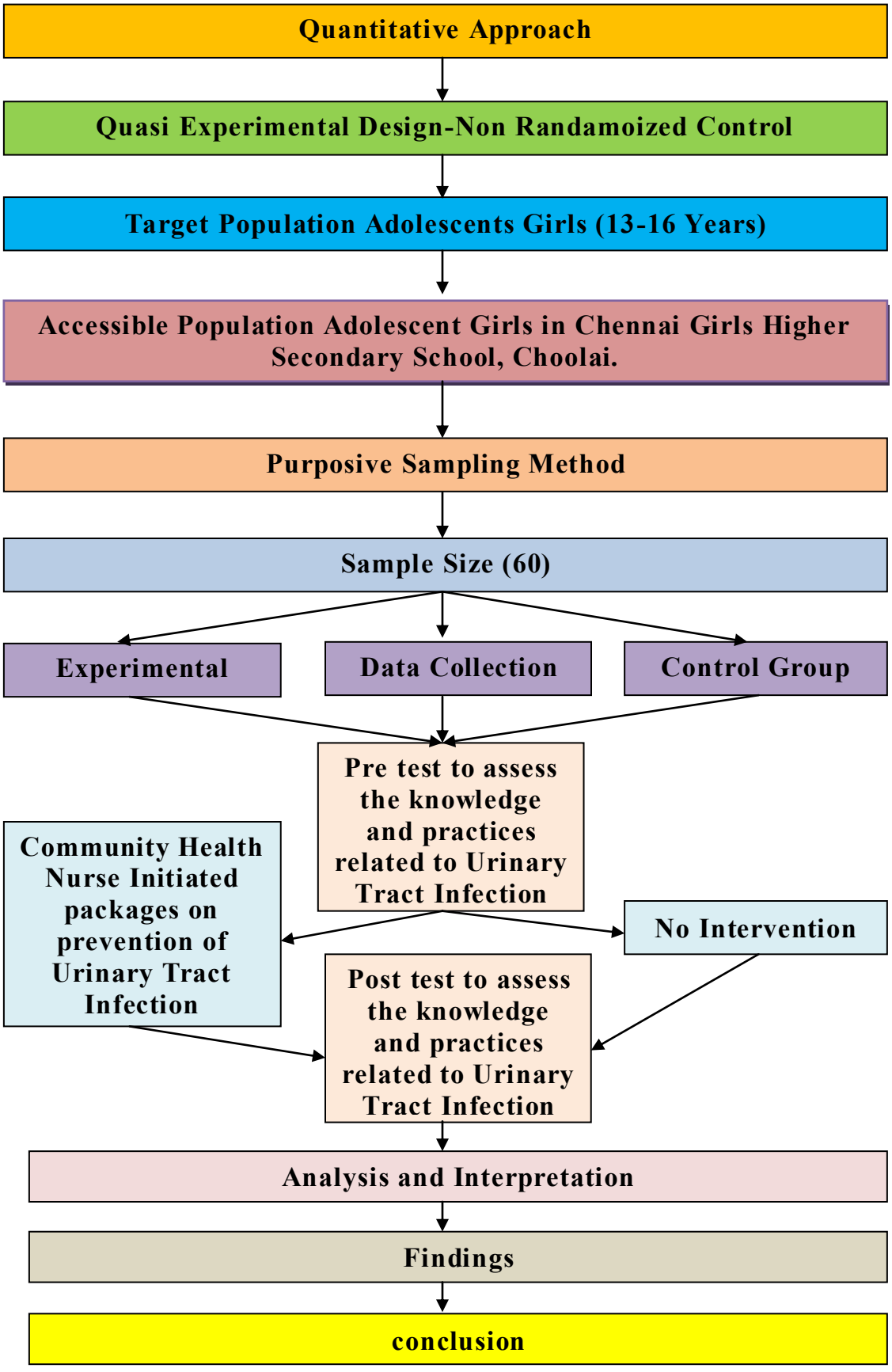
Independent't' test was used to compare the post test level knowledge and practices regarding prevention of urinary tract infection among adolescent girls between experimental and control group.

Chi-Square test and **Extended McNemar's test** was used to find out the association between the post tests level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls with their selected demographic variables in experimental group.

Effectiveness and generalization of study result was given in percentage with 95% CI and mean difference with 95% CI.

Simple bar diagram, multiple bar diagram , scatter diagram with regression estimate were used to represent the data . A p value of ≤ 0.05 was considered statistically significant and two tailed tests were used for significance testing.

FIG-3.1: SCHEMATIC REPRESENTATION OF THE STUDY



CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of data collected from 60 samples of adolescent school girls to evaluate the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls , Chennai girls higher secondary school, Rotlers street,Chennai.

ORGANIZATION OF DATA

The findings of the study were grouped and analyzed under the following sections.

Section-A : Frequency and percentage distribution of demographic variables of adolescent girls in experimental and control group.

Section-B : Assessment of pre test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group .

Section-C : Assessment of post test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group .

Section-D : Impact of community health initiated packages on prevention of urinary tract infection in experimental group.

Section-E : Compare the Pre test and post test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group.

Section-F : Association between post test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental group and their selected demographic variables.

SECTION-A : FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC VARIABLES OF ADOLESCENT GIRLS.

Table 4.1: Frequency and distribution demographic profile of adolescent girls

Demographic variables		Group			
		Experiment (n=30)		Control (n=30)	
		n	%	n	%
Age	13-14 years	27	90.00%	28	93.33%
	15-16 years	3	10.00%	2	6.67%
	17-18 years	0	0.00%	0	0.00%
	19 years	0	0.00%	0	0.00%
Education	8th standard	16	53.33%	12	40.00%
	9th standard	14	46.67%	18	60.00%
	10th standard	0	0.00%	0	0.00%
	11th standard	0	0.00%	0	0.00%
Education status of mother	No formal education	4	13.33%	9	30.00%
	Primary education	5	16.67%	4	13.33%
	Secondary education	17	56.67%	15	50.00%
	Graduate	4	13.33%	2	6.67%
Occupation status of the mother	Self employee	2	6.67%	7	23.33%
	Government employee	3	10.00%	2	6.67%
	Private employee	9	30.00%	5	16.67%
	House maker	16	53.33%	16	53.33%
Occupation status of the father	Self employee	19	63.33%	17	56.67%
	Government employee	1	3.33%	3	10.00%
	Private employee	10	33.33%	10	33.33%
	Un employee	0	0.00%	0	0.00%
Monthly income of the family	Rs. <5,000	7	23.33%	9	30.00%
	Rs. 5000-10000	15	50.00%	12	40.00%
	Rs. 10000-15000	2	6.67%	5	16.67%
	Rs. >15000	6	20.00%	4	13.33%

Demographic variables		Group			
		Experiment (n=30)		Control (n=30)	
		n	%	n	%
Religion	Hindu	17	56.67%	21	70.00%
	Christian	11	36.67%	8	26.67%
	Muslim	2	6.67%	1	3.33%
	Others	0	0.00%	0	0.00%
Types of family	Nuclear family	20	66.67%	19	63.33%
	Joint family	8	26.67%	8	26.67%
	Extended family	2	6.67%	3	10.00%
	Single parent	0	0.00%	0	0.00%
Knowledge of Hygiene practice	Self	10	33.33%	10	33.33%
	Parents	15	50.00%	11	36.67%
	Friends	3	10.00%	5	16.67%
	Others	2	6.67%	4	13.33%
Number of times you had signs and symptoms of urinary tract infection	None	10	33.33%	11	36.67%
	One time	13	43.33%	15	50.00%
	Two times	7	23.33%	4	13.33%
	> Two times	0	0.00%	0	0.00%

NS= not significant p>0.05 not significant DF= Degrees of Freedom

Data presented in table 1 show the following

Age: 90% of students belongs to age group of 13-14 years and 10% of students were 15-16 years in experimental group, 93.3% of students belongs to age group of 13-14 years and 6.67% of students were 15-16 years in control group.

Education: 53.3% of students were in 8^{th} standard and 46.67% were 9^{th} standard in experimental group.40% of students were 8^{th} standard and 60% of students were 9^{th} standards in control group.

Education status of mother13.33% of student mothers had no formal education and 16.67% had primary education,56.67% had secondary education and 13.33%had graduate mothers in experimental group.30% of student mothers had no formal education, 13.33% had primary education ,50% had secondary education mothers and 6.67% students had graduate mothers in control groups.

Occupation status of mother: 6.67% of student mothers had self employees, 10% had government employees 30% had private employees and 53.33% of student mothers had house makers in experimental group.23.33% of student mothers had self employees ,6.67% had government employees,16.67% had private employees and 53.33% of student mothers had house makers in control group.

Occupational status of father: 63.3% of student fathers had self employees , 3.33% had government employees, 33.33% had government employees in experimental group. 56.67% of student fathers had self employees, 10% had government employee and 33.33% of students fathers had private employees in control group.

Monthly income of the family: 23.33% of students have family income Rs.<5,000, 50% have Rs. 5,000 – 10,000 , 6.67% have Rs. 10,000 – 15,000,20% have Rs.>15,000 in experimental group. 30% of students have family income Rs.<5,000, 40% have Rs. 5,000 – 10,000 , 16.67% have Rs. 10,000 – 15,000,13.33% of students have family income Rs.>15,000 in control group.

Religion: 56.67% of students belongs to hindu, 36.67% of students belongs to Christian ,6.67% of students belongs to muslim in experimental group. 70% of students belongs to hindu, 26.67% of students belongs to Christian ,3.33% of students belongs to muslim in control group.

Types of family:66.67% of students had nuclear family, 26.67% of students had joint family,6.67% had extended family in experimental group. 63.33% of students had nuclear family, 26.67% of students had joint family,10% of students had extended family in control group.

Knowledge of hygiene practice:33.33% of students have self knowledge,50% have by parents ,10% have by friends and 6.67% have by others in experimental group. 33.33% of students have self knowledge,36.67%% have by parents ,16.67% have by friends and 13.33% have by others in control group.

Number of time you had signs and symptoms of urinary tract infection: 33.33%of students had none signs and symptoms, 43.33% of students had one time , 23.33% of students had two times in experimental group. 36.67%of students had none signs and symptoms, 50% of students had one time , 13.33% of students had two times in control group.

Fig-4.1: Age Distribution of Adolescent Girls

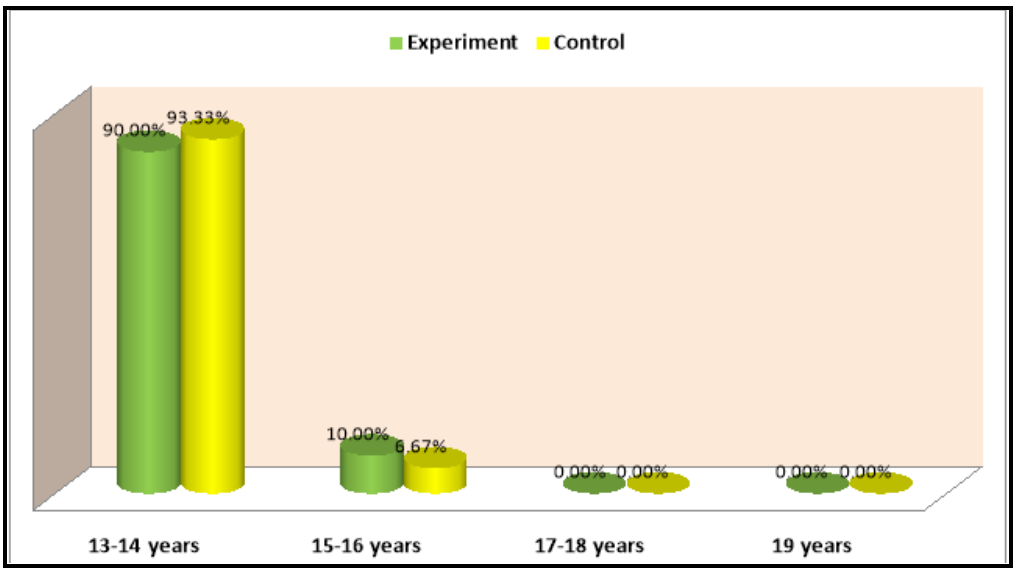


Fig-4.1.show that Maximum (27) 90% of the students belongs to age group of 13-14 years in experimental group, (28) 93.3% of the students belongs to age group of 13-14 years in control group.

Fig-4.2: Studying Class of the Adolescent Girls

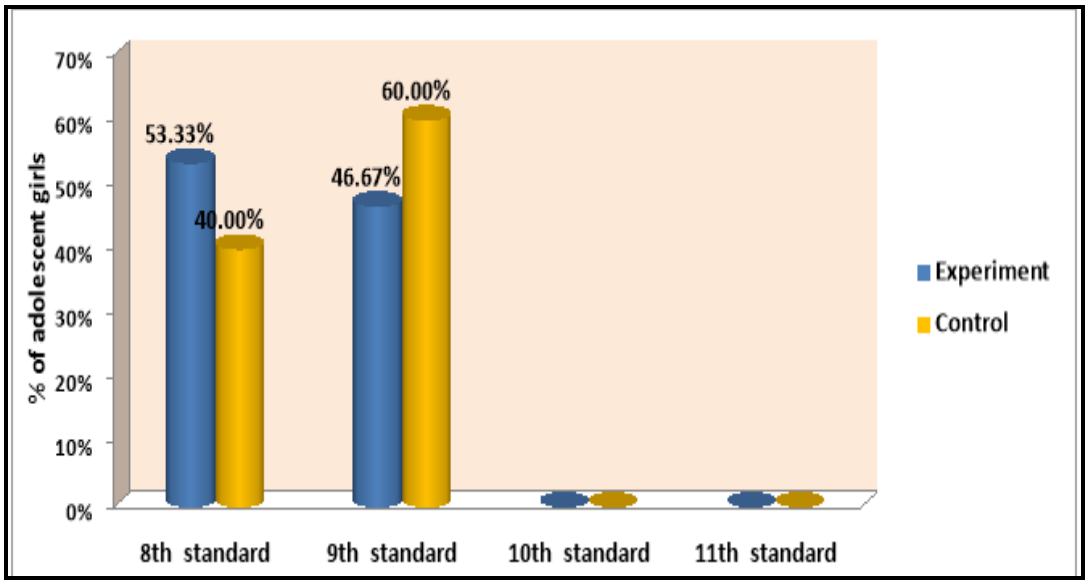


Fig.4.2 shows that Majority of the students (16) 53.33% were 8th standard in experimental group and (18) 60% were 9th standard in control group.

Fig-4.3: Mother Education Status of Adolescent Girls

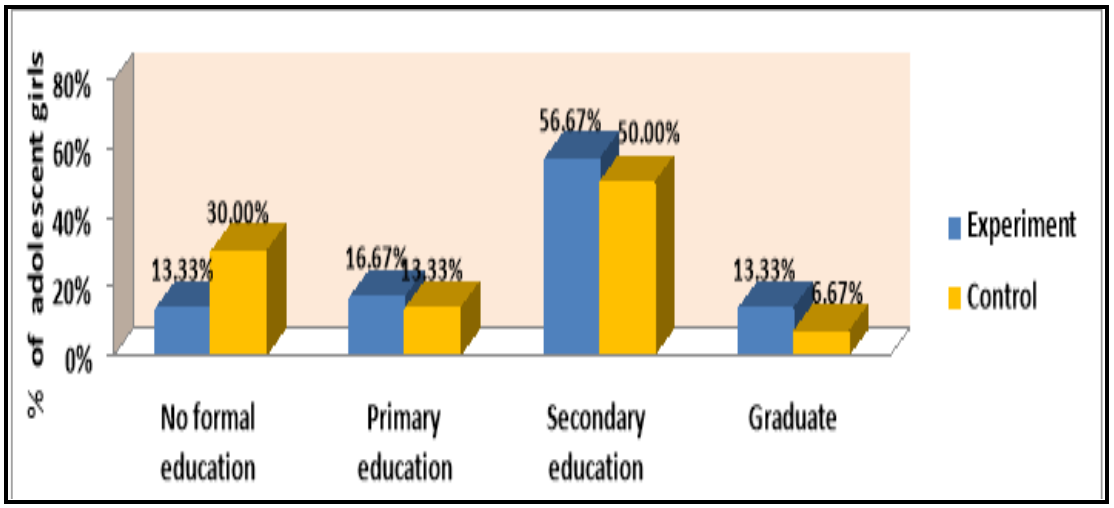


Fig.4.3. shows that Majority of the Mother education of the students 17 (56.67%) were secondary education in experimental group and (15) 50% were secondary education in control group.

Fig-4.4: Mother Occupation Status of Adolescent Girls

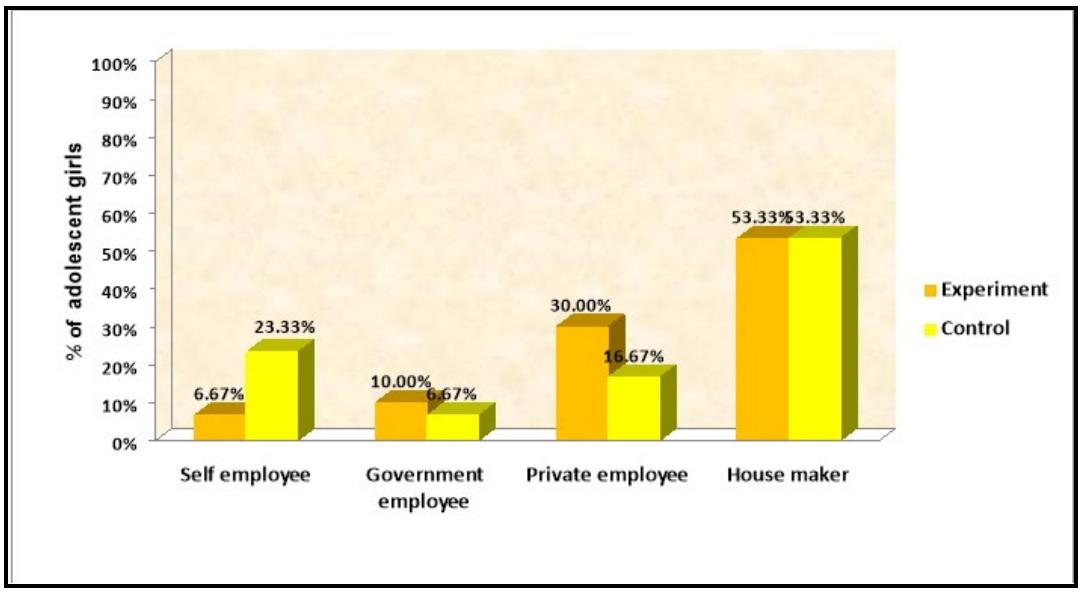


Fig.4.4.shows that Maximum (16) 53.33% of student's mothers were house worker in experimental group and (16) 53.33% of student's mothers were house worker in control group.

Fig-4.5: Father Occupation Status of Adolescent Girls

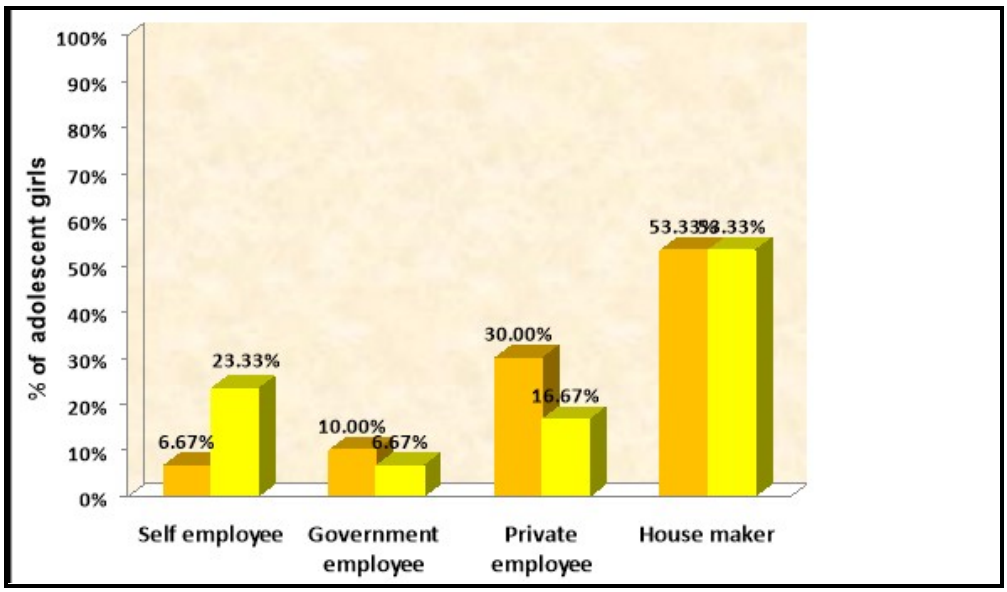


Fig.4.5 shows that Maximum (19) 63.33% of student's fathers were self employee in experimental group and (17) 56.67% of student's fathers were self employee in control group.

Fig.4.6: Family Monthly Income of Adolescent Girls

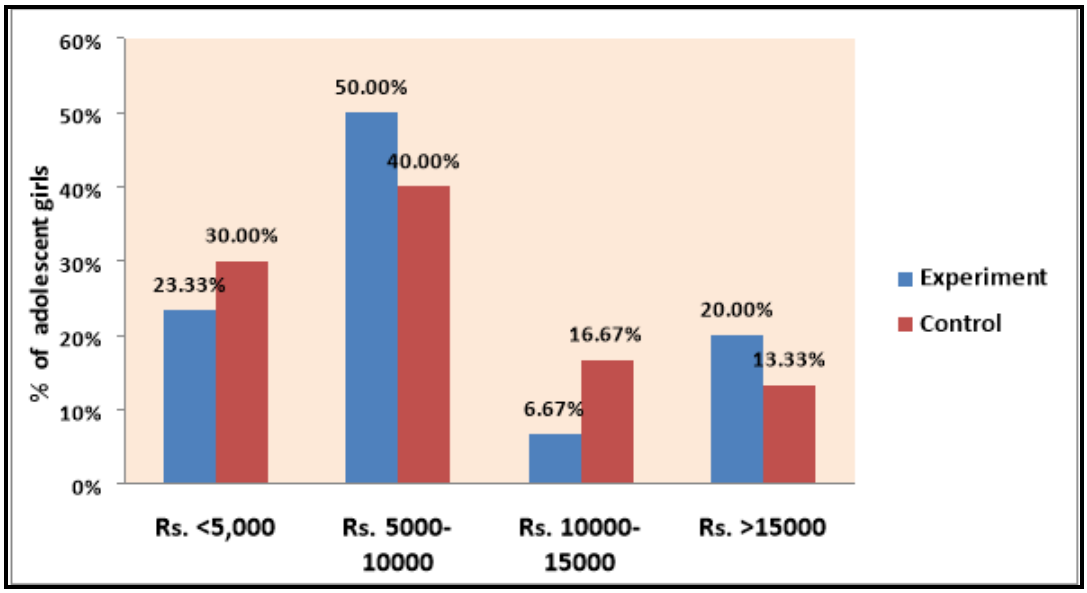


Fig.4.6. shows that Majority of the students about (15) 50%were earning (Rs.5,000 – 10,000) per month as family income in experimental group and (12) 40%were earning (Rs.5,000 – 10,000) per month as family income in control group.

Fig.4.7: Religion of Adolescent Girls

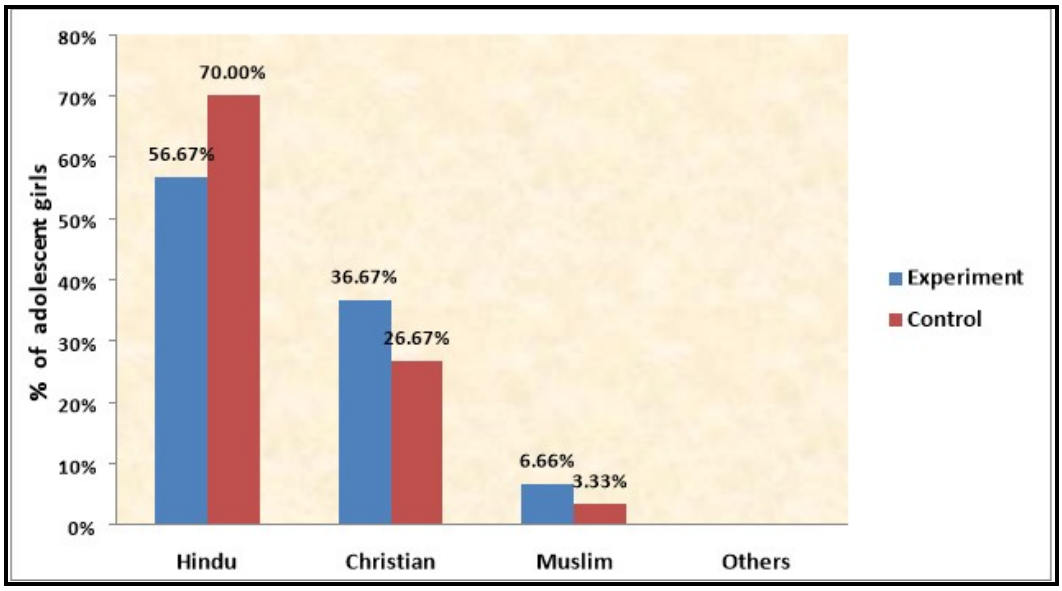


Fig.4.7. shows that Majority of the students (17) 56.67% belongs to Hindu in experimental group and (21) 56.67% belongs to Hindu in control group.

Fig.4.8: Type of Family of Adolescent Girls

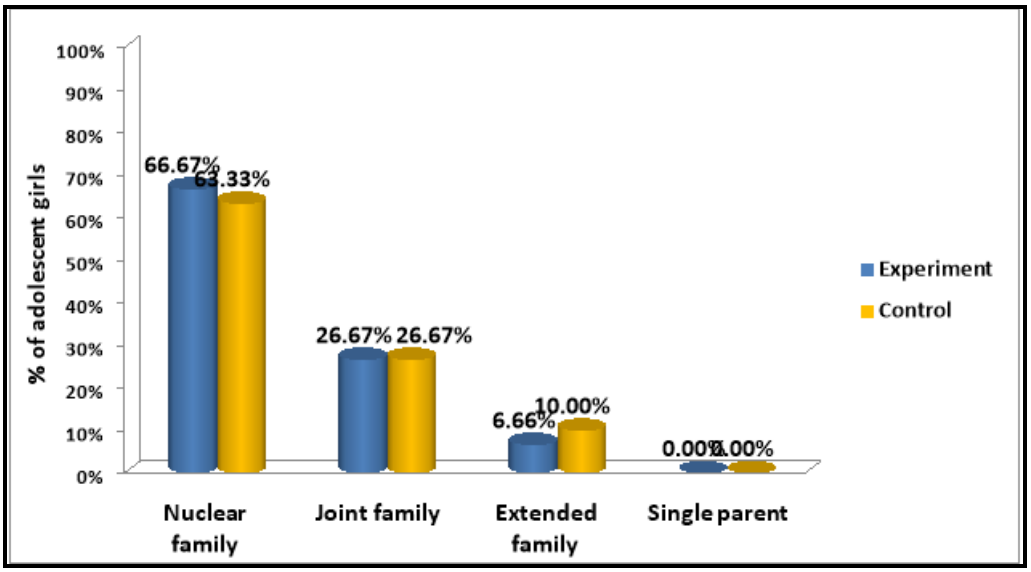


Fig.4.8. shows that Majority of the students (20) 66.67% belongs to nuclear family in experimental group and (19) 63.33% belongs to nuclear family in control group.

Fig 4.9.Knowledge of Hygiene Practice of Adolescent Girls

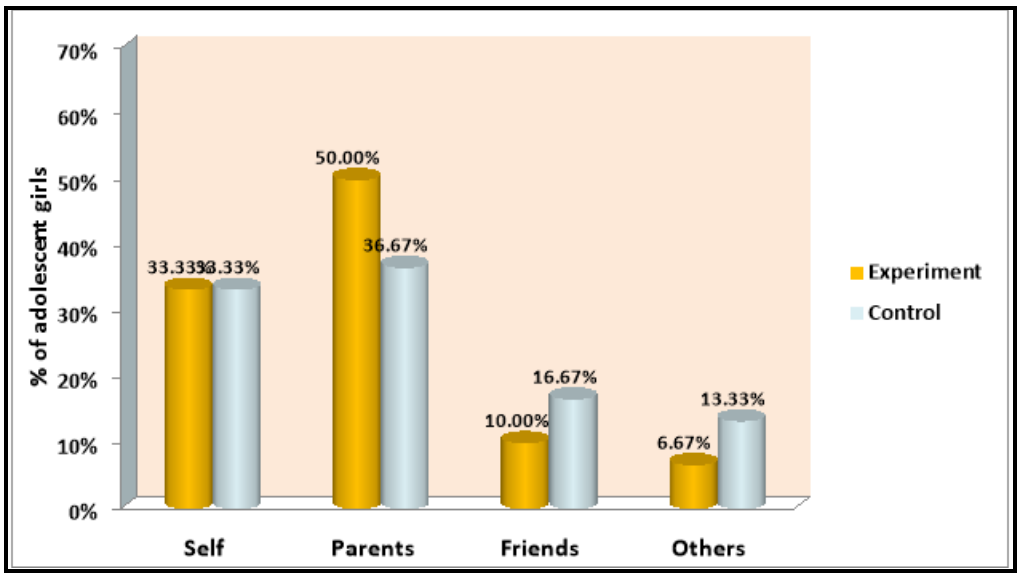


Fig 4.9.shows that Majority of the students (15) 50% belongs to knowledge of hygiene practice taught by parents in experimental group and (11) 36.67% belongs to knowledge of hygiene practice taught by parents in control group.

Fig-4.10: Number of Times had Signs &Symptoms of Urinary Tract Infection

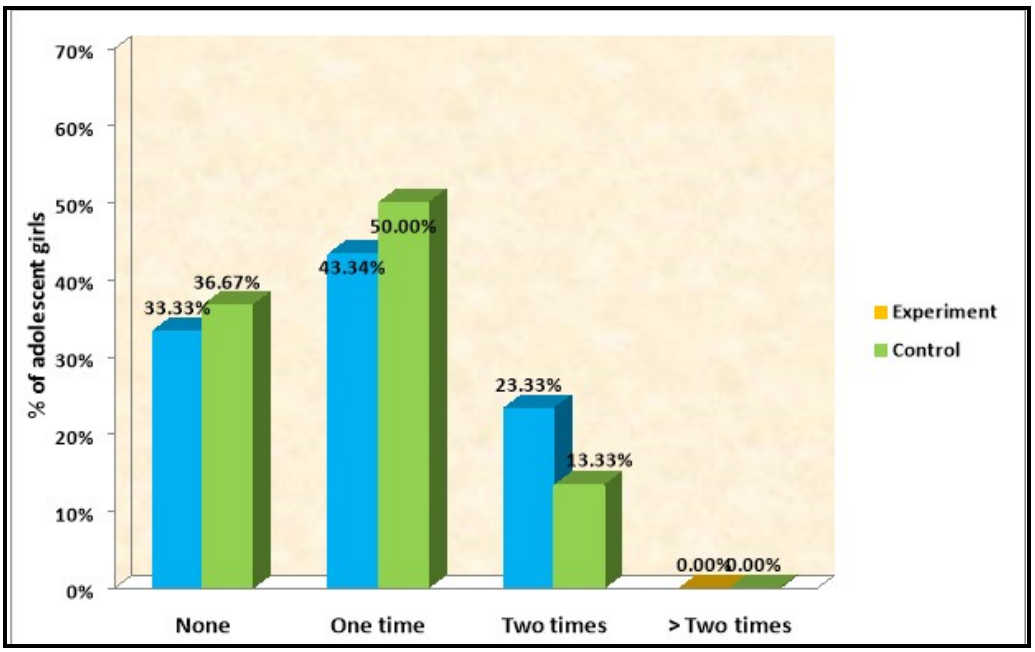


Fig.4.10. shows that Majority of the students (13) 43.33% had one time of signs and symptoms of urinary tract infection in experimental group and (15) 50% had one time of signs and symptoms of urinary tract infection in control group.

SECTION-B: DESCRIPTION OF PRETEST LEVEL OF KNOWLEDGE AND PRACTICES AMONG ADOLESCENT GIRLS IN EXPERIMENTAL AND CONTROL GROUP

Table-4.2:Comparison of Pre Test Level of Knowledge Score

Level of Knowledge	Experiment		Control		Chi square test
	n	%	N	%	
Inadequate	15	50.00%	14	46.67%	$\chi 2=0.23$ DF=2 P=0.89(NS)
Moderate	13	43.33%	13	43.33%	
Adequate	2	6.67%	3	10.00%	
Total	30	100%	30	100%	

(Fig 4.11) P>0.05 not significant

Table no.4.2 compares the pre test level of knowledge score between experimental and control adolescent girls.

Before **community health nurse initiated packages**, in experimental group ,50.00% of the adolescent girls are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 6.67% of them are having adequate level of knowledge score .In control group ,46.67% of the adolescent girls are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 10% of them are having adequate level of knowledge score.Statistically there is no significant difference between experimental and control group. Level of knowledge score between experimental and control group was calculated using chi-square test.

Fig-4.11: Pretest Level of Knowledge Score

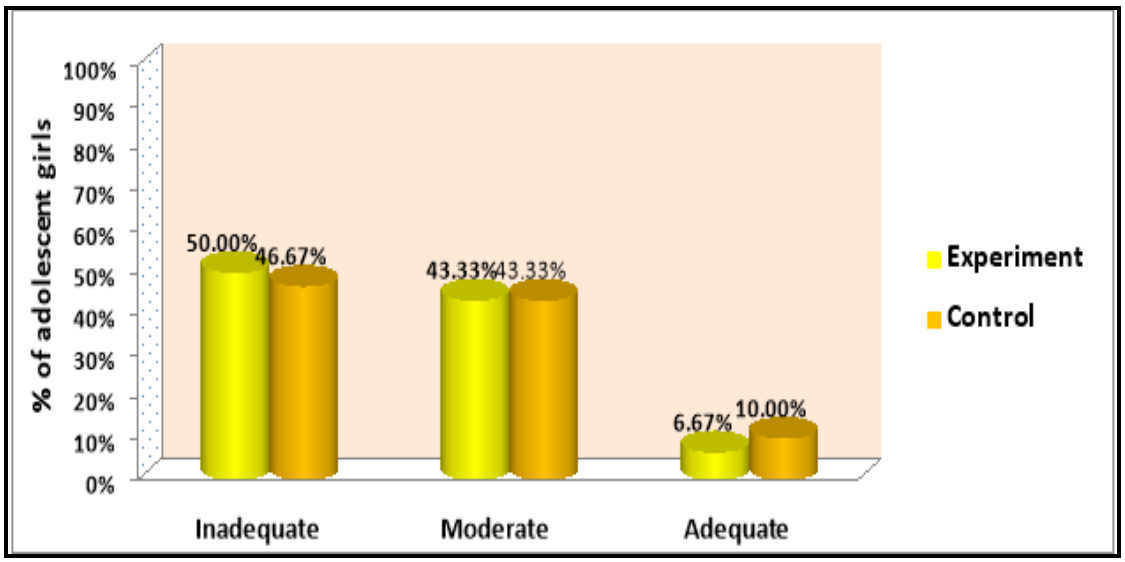


Table4- 3: Comparison of Domainwise Mean Pre Test Knowledge Score

S. No	Knowledge on UTI	Experiment		Control		Mean Difference	Student's independentt-test
		Mean	SD	Mean	SD		
1	General information	2.07	1.17	2.07	1.01	0.00	t=0.00 p=1.00 DF= 58 , (NS)
2	Causes and Risk factors	2.23	1.25	2.57	1.43	-0.24	t=0.96 p=0.34 DF= 58 , (NS)
3	Signs and Symptoms	1.03	.76	1.17	.75	-0.14	t=0.68 p=0.49 DF= 58 , (NS)
4	Prevention	3.77	1.55	3.57	1.43	0.20	t=0.52 p=0.60 DF= 58 , (NS)
	OVERALL	9.10	2.38	9.37	2.79	0.27	t=0.40 p=0.69 DF= 58 , (NS)

P>0.05 not significant DF=Degrees of Freedom NS= not significant

Table no 4.3 shows the domain wise comparison of pre test knowledge score regarding regarding prevention of urinary tract infection among adolescent girls.

Table-4. 4: Comparison of Pre Test Level of Practice Score

Level of practice	Experiment		Control		Chi square test
	N	%	n	%	
Poor	10	33.33%	9	30.00%	$\chi 2=0.25 P=0.88$ DF=2 (NS)
Moderate	18	60.00%	18	60.00%	
Good	2	6.67%	3	10.00%	
Total	30	100%	30	100%	

(fig 12) P>0.05 not significant

Table no.4.4 compares the pre test level of practice score between experimental and control adolescent girls.

Before ***community health nurse initiated packages***, in experimental, 33.33% of the adolescent girls are having poor level of practice score, 60.0% of them having moderate level of practice score and 6.67% of them are having Good level of practice score .In control group ,30.00% of the adolescent girls are having poor level of practice score, 60.0% of them having moderate level of practice score and 10.00% of them are having Good level of practice score. Statistically there is no significant difference between experimental and control group. Level of practice score between experimental and control group was calculated using chi-square test.

Fig-4.12: Pretest Level of Practice Score

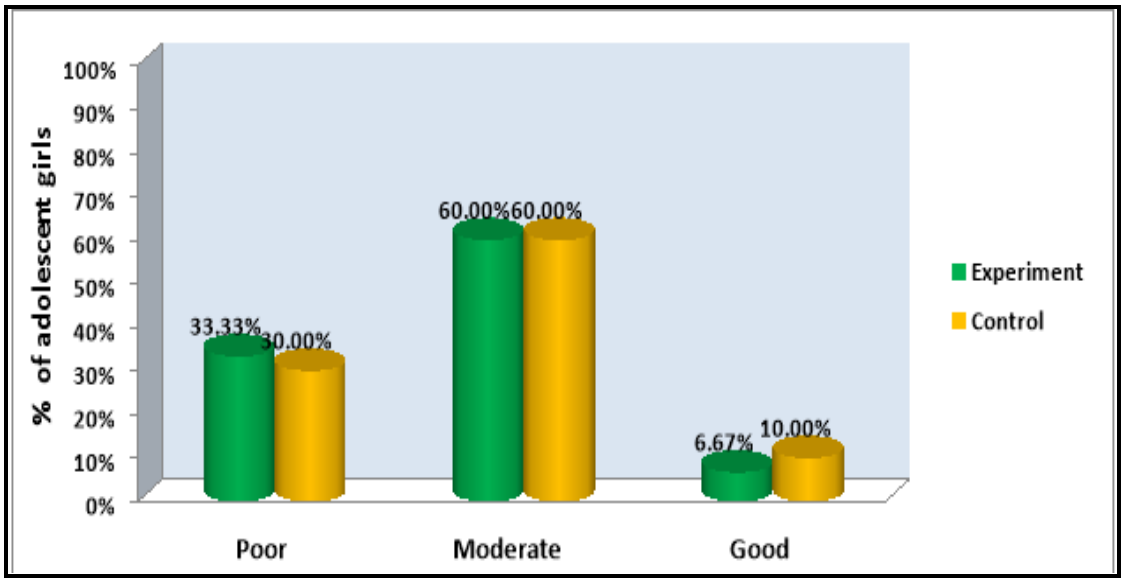


Table-4.5: Comparison of overall Mean Pre Test Practice Score

Group	N	Mean	Std. Deviation	Mean difference	Student'S independent t-test
Experiment	30	4.87	1.17	0.10	t=0.33 P=0.74 DF = 58, not significant
Control	30	4.77	1.19		

P>0.05 not significant DF=Degrees of Freedom

Table no 4.5 shows the comparison of overall pre-test mean practice score before administration of **community health nurse initiated packages.**On an average, experimental group adolescent girls are having 4.87 practice score and control group adolescent girls are having 4.77 practice score, so the difference is 0.10 practice score. This difference is small and it is not statistically significant difference. Statistical significance was calculated by using student's independent 't'test.

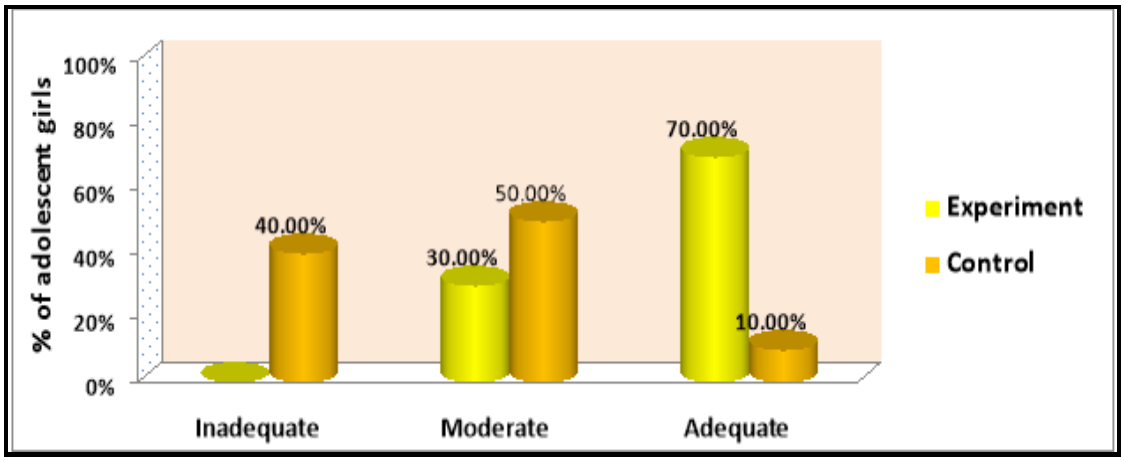
SECTION-C: DESCRIPTION OF POST TEST LEVEL OF KNOWLEDGE AND PRACTICES AMONG ADOLESCENT GIRLS IN EXPERIMENTAL AND CONTROL GROUP

Table-4.6: Comparison of Post Test Level Of Knowledge Score

Level of knowledge	Experiment		Control		Chi square test
	n	%	n	%	
Inadequate	0	0.00%	12	40.00%	$\chi 2=27.00$ P=0.001*** DF=2 (S)
Moderate	9	30.00%	15	50.00%	
Adequate	21	70.00%	3	10.00%	
Total	30	100%	30	100%	

Table no.4.6.compares the post-test level of knowledge score between experimental and control group adolescent girls.

Fig-4.14: Post Test Level of Knowledge Score



After **community health nurse initiated packages**, in experimental group ,none of the adolescent girls are having inadequate level of knowledge score and 30.00% of them having moderate level of knowledge score and 70.00% of them are having adequate level of knowledge score .In control group ,40.00% of the adolescent girls are having inadequate level of knowledge score and 50.00% of them having moderate level of knowledge score and 10.00% of them are having adequate level of knowledge score.Statistically there is no

significant difference between experimental and control group. Level of knowledge score between experimental and control group was calculated using chi-square test.

Table-.7: Comparison of overall Mean Post Test Knowledge Score

S. No	Knowledge on UTI	Experiment		Control		Mean Difference	Student's independentt-test
		Mean	SD	Mean	SD		
1	General information	3.60	.50	2.13	1.04	1.47	t=6.96 p=0,001*** DF= 58 , (S)
2	Causes and Risk factors	4.20	.89	2.67	1.37	1.53	t=5.14 p=0,001*** DF= 58 , (S)
3	Signs and Symptoms	2.23	.77	1.20	.71	1.03	t=5.37 p=0,001*** DF= 58 , (S)
4	Prevention	6.07	1.64	3.53	1.53	2.54	t=6.20 p=0,001*** DF= 58 , (S)
	OVERALL	16.10	2.52	9.53	2.83	6.57	t=9.49 p=0,001*** DF= 58 , (S)

P>0.05 not significant DF=Degrees of Freedom NS= not significant

Table no 4.7. shows the domain wise comparison of post test knowledge score regarding regarding prevention of urinary tract infection among adolescent girls.

Table-4.8: Comparison of Post Test Level Of Practice Score

Level of practice	Experiment		Control		Chi square test
	N	%	n	%	
Poor	0	0.00%	7	23.33%	$\chi 2=26.58$ p=0.001*** DF=2(S)
Moderate	8	26.67%	20	66.67%	
Good	22	73.33%	3	10.00%	
Total	30	100%	30	100%	

P<0.001 significant

Fig-4.16: Posttest Level of Practice Score

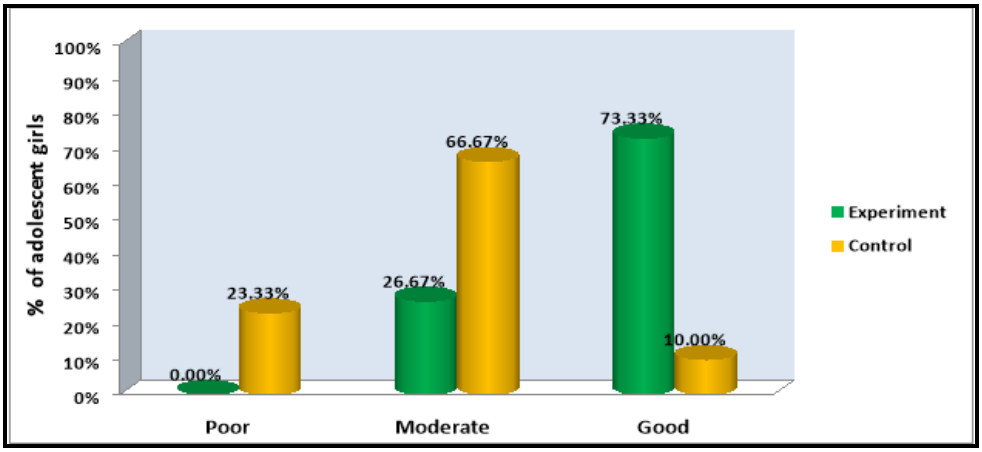


Table no 4.8. compares the post-test level of practice score between experimental and control group.

After ***community health nurse initiated packages***, in experimental ,none of the adolescent girls are having poor level of practice score, 26.67% of them having moderate level of practice score and 73.33% of them are having Good level of practice score .In control group ,23.33% of the adolescent girls are having poor level of practice score, 66.67% of them having moderate level of practice score and 10.00% of them are having Good level of practice score .Statistically there is a significant difference between experimental and control group. Level of practice score between experimental and control group was calculated using chi-square test.

SECTION-D: IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON KNOWLEDGE AND PRACTICES REGARDING PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS IN EXPERIMENTAL GROUP

Table-4.9: Impact of Community Health Nurse Initiated Packages On Knowledge Regarding Prevention of Urinary Tract Infection among Adolescent Girls

Group	Test	Maximum score	Mean score	% of mean score	Mean Difference of knowledge gain score with 95% Confidence interval	Percentage Difference of knowledge gain score with 95% Confidence interval
Experiment	Pre test	20	9.10	45.50%	7.00 (5.93 – 8.07)	35.00% (29.65% – 40.35%)
	Post test	20	16.10	80.50%		
Control	Pre test	20	9.37	46.85%	0.16 (-0.07 – 0.40)	0.80% (-0.04% – 2.00%)
	Post test	20	9.53	47.65%		

Fig-4.13: Percentage of Knowledge and Practice Gain Score

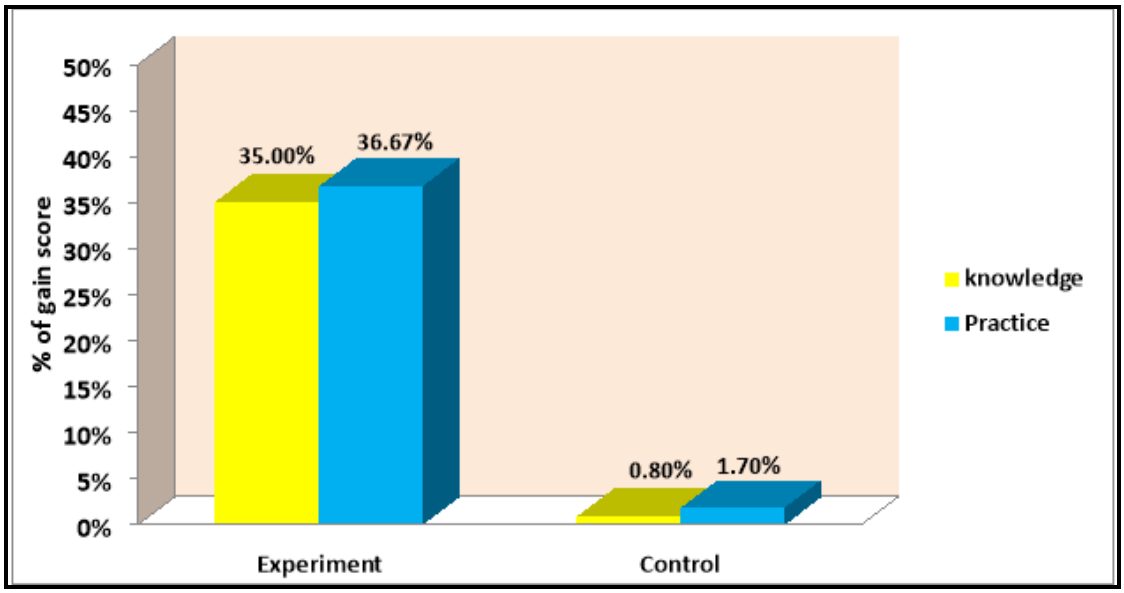


Fig 4.13 Table no 4.9 shows the impact of ***community health nurse initiated packages*** regarding knowledge score among adolescent girls and generalization of knowledge score.

Experimental group gained 35.00% knowledge score whereas control group gained only 0.80% knowledge score.

Differences and generalization of knowledge score between pre test and post test score was calculated using and mean difference with 95% CI and proportion with 95% CI.

Table-4.10: Impact of Community Health Nurse Initiated Packages On Practice Regarding Prevention of Urinary Tract Infection Among Adolescent Girls

Group	Test	Maximum score	Mean score	% of mean score	Mean Difference of practice gain score with 95% Confidence interval	Percentage Difference of practice gain score with 95% Confidence interval
Experiment	Pre test	10	4.87	48.70%	3.43 (2.60 – 4.26)	36.67% (34.33% – 39.99%)
	Post test	10	8.30	83.00%		
Control	Pre test	10	4.77	47.70%	0.17 (-0.02 – 0.36)	1.70% (-0.20% – 3.60%)
	Post test	10	4.94	49.40%		

Fig 4.13 Table no 4.10 shows the impact of ***community health nurse initiated packages*** regarding practice score among adolescent girls and generalization of practice score.

Experimental group gained 36.67% practice score whereas control group gained only 1.70% practice score.

Differences and generalization of practice score between pre test and post test score was calculated using and mean difference with 95% CI and proportion with 95% CI.

SECTION-E: COMPARE THE PRE TEST AND POST TEST LEVEL OF KNOWLEDGE AND PRACTICES REGARDING PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS IN EXPERIMENTAL AND CONTROL GROUP

Table-4.11: Comparison of Pre Test and Post Test Level of Knowledge Score (Experimental)

Level	Pre test		Post test		Extended McNemar'stest
	N	%	N	%	
Inadequate	15	50.00%	0	0.00%	$\chi 2=25.18 P=0.001^{***}$ DF=2 (S)
Moderate	13	43.33%	8	26.67%	
Adequate	2	6.67%	22	73.33%	
Total	30	100%	30	100%	

$P \leq 0.05$ significant

Table no.4.11. compares the level of knowledge score between pre-test and post-test score.

In experimental group, in pre test, 50.00% of them are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 6.67% of them are having adequate score.In post test ,none of them are having inadequate level of knowledge score, 26.67% of them having moderate level of knowledge score ,73.33% of them are having adequate level of knowledge score. Statistically there is a significant difference between pre-test and post-test score. Pre test and post test knowledge score was calculated using Extended McNemar's test.

Table-4.12: Comparison of Pre Test And Post Test Level of Knowledge Score (Control)

Level	Pre test		Post test		Extended McNemar's test
	N	%	N	%	
Inadequate	14	46.67%	12	40.00%	$\chi 2=1.12 P=0.57$ DF=2(NS)
Moderate	13	43.33%	15	50.00%	
Adequate	3	10.00%	3	10.00%	
Total	30	100%	30	100%	

P>0.05 not significant

Table no.4.12.compares the level of knowledge score between pre-test and post-test score.

In control, in pre test, 46.67% of them are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 10.00% of them are having adequate score. In post test ,40.00% of them are having inadequate level of knowledge score, 50.00% of them having moderate level of knowledge score ,10.00% of them are having adequate level of knowledge score. Statistically there is no significant difference between pre-test and post-test score. Pre test and post test knowledge score was calculated using Extended McNemar's test.

Table-4.13: Comparison of Pre Test and Post Test Mean Knowledge Score

Group	Knowledge on UTI	Pre test		Post test		Mean Difference	Paired t-test
		Mean	SD	Mean	SD		
Experiment	General information	2.07	1.17	3.60	.50	1.53	t=7.59 p=0.001*** DF= 29 , (S)
	Causes and Risk factors	2.23	1.25	4.20	.89	1.97	t=7.43 p=0.001*** DF= 29 , (S)
	Signs and Symptoms	1.03	.76	2.23	.77	1.20	t=6.18 p=0.001*** DF= 29 , (S)
	Prevention	3.77	1.55	6.07	1.64	2.30	t=5.17 p=0.001*** DF= 29 , (S)
	Overall	9.10	2.38	16.10	2.52	7.00	t=13.38 p=0.001*** DF= 29 , (S)
Control	General information	2.07	1.01	2.13	1.04	0.06	t=1.44 p=0.16 DF= 29 , (NS)
	Causes and Risk factors	2.57	1.43	2.67	1.37	0.10	t=1.14 p=0.34 DF= 29 , (NS)
	Signs and Symptoms	1.17	.75	1.20	.71	0.03	t=0.56 p=0.57 DF= 29 , (NS)
	Prevention	3.57	1.43	3.53	1.53	-0.04	t=0.30p=0.77 DF= 29 , (NS)
	Overall	9.37	2.79	9.53	2.83	0.16	t=1.41 p=0.17 DF= 29 , (NS)

Fig 4.13.Considering Experimental group Knowledge , in pre test they are having 9.10 knowledge score and in post test they are having 16.10 knowledge score, so the difference is 7.00, this difference is large and it is statistically significant. Considering Control group Knowledge , in pre test they are having 9.37 knowledge score and in post test they are having 9.53 knowledge score, so the difference is 0.16, this difference is small and it is not statistically significant. Statistical significance difference between pre-test and post-test was calculated using student paired t-test.

On an average, adolescent girls are improved their knowledge score from 9.10 to 16.10 after the administration of ***community health nurse initiated packages***. Or we can say , in pre test they are able to answer only 9 questions before administration of ***community health nurse initiated packages*** after administration of ***community health nurse initiated packages***they are able to answer upto 16 questions. Due to ***community health nurse initiated packages*** they are able to answer 7 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't'test.

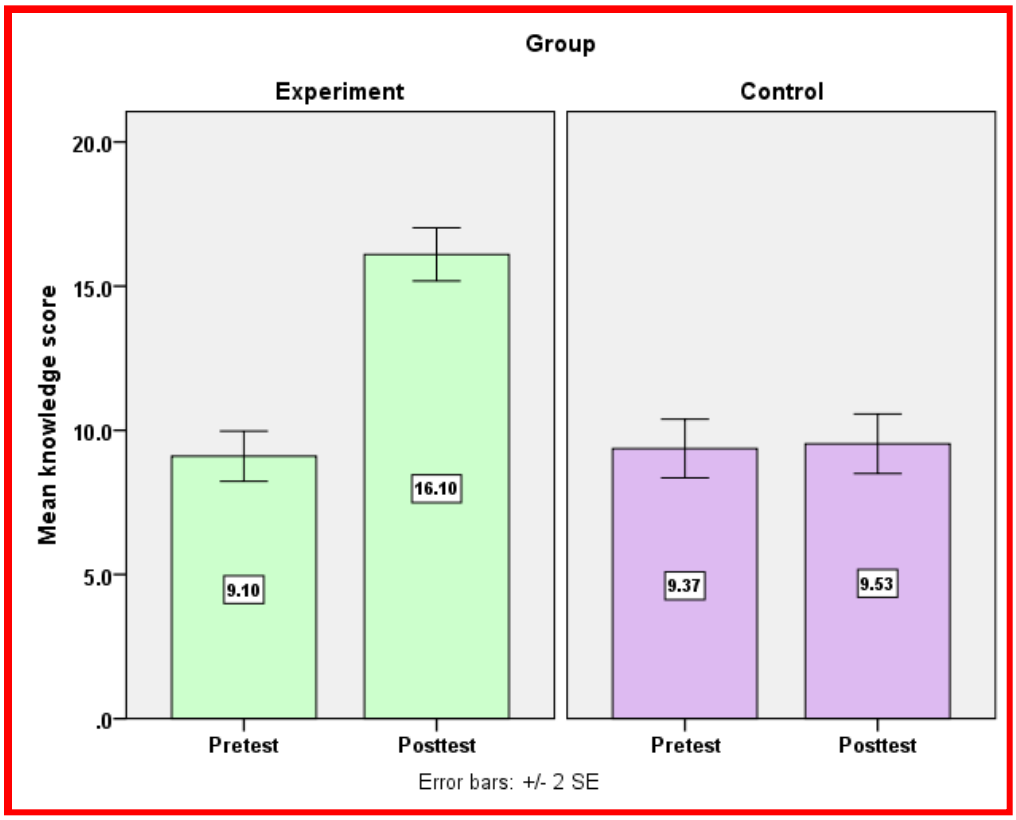


Fig 4.15.: Simple bar with 2 standard error diagram compares the pre test and post test knowledge score among experiment and control group of adolescent girls.

Table-4.14: Comparison of Pre Test And Post Test Level of Practice Score (Experimental)

Level	Pre test		Post test		Extended McNemar's test
	N	%	N	%	
Poor	10	33.33%	0	0.00%	$\chi 2=30.00$ p=0.001*** DF=2 (S)
Moderate	18	60.00%	8	26.67%	
Good	2	6.67%	22	73.33%	
Total	30	100%	30	100%	

P<0.05 * significant

Table no4.14 compares the level of practice score between pre-test and post-test score.

In experimental group, in pre test, 33.33% of them are having poor level of practice score and 60.00% of them having moderate level of practice score and 6.67% of them are having adequate score.In post test ,none of them are having inadequate level of practice score, 26.67% of them having moderate level of practice score ,73.33% of them are having adequate level of practice score. Statistically there is a significant difference between pre-test and post-test score. Pre test and post test practice score was calculated using Extended McNemar's test.

Table-4.15: Comparison of Pre Test And Post Test Level of Practice Score (Control)

Level	Pre test		Post test		Extended McNemar's test
	N	%	N	%	
Poor	9	30.00%	7	23.33%	$\chi 2=2.00$ p=0.36 DF=2(NS)
Moderate	18	60.00%	20	66.67%	
Good	3	10.00%	3	10.00%	
Total	30	100%	30	100%	

P<0.05 * significant

Table no.4.15 compares the level of practice score between pre-test and post-test score.

In control, in pre test, 30.00% of them are having poor level of practice score and 60.00% of them having moderate level of practice score and 10% of them are having good level of practice score.In post test ,23.33% of them are having poor level of practice score, 66.67% of them having moderate level of practice score ,10.00% of them are having good level of practice score. Statistically there is no significant difference between pre-test and post-test score.

Pre test and post test practice score was calculated using Extended McNemar's test.

Table-4.16: Comparison of Pre Test And Post Test Mean Practice Score

Group		N	Mean	SD	Mean reduction score	Paired t-test
Experimental group	Pre-test	30	4.87	1.17	3.43	t=9.46 p=0.001*** DF=29(S)
	Post-test	30	8.30	1.91		
Control group	Pre-test	30	4.77	1.19	0.17	t=1.91p=0.06 DF=29 (NS)

Considering Experimental group Practice , in pre test they are having 4.87 practice score and in post test they are having 8.30 practice score, so the difference is 3.43, this difference is large and it is statistically significant. Considering Control group Practice , in pre test they are having 4.77 practice score and in post test they are having 4.94 practice score, so the difference is 0.17, this difference is small and it is not statistically significant. Statistical significance difference between pre-test and post-test was calculated using student paired t-test.

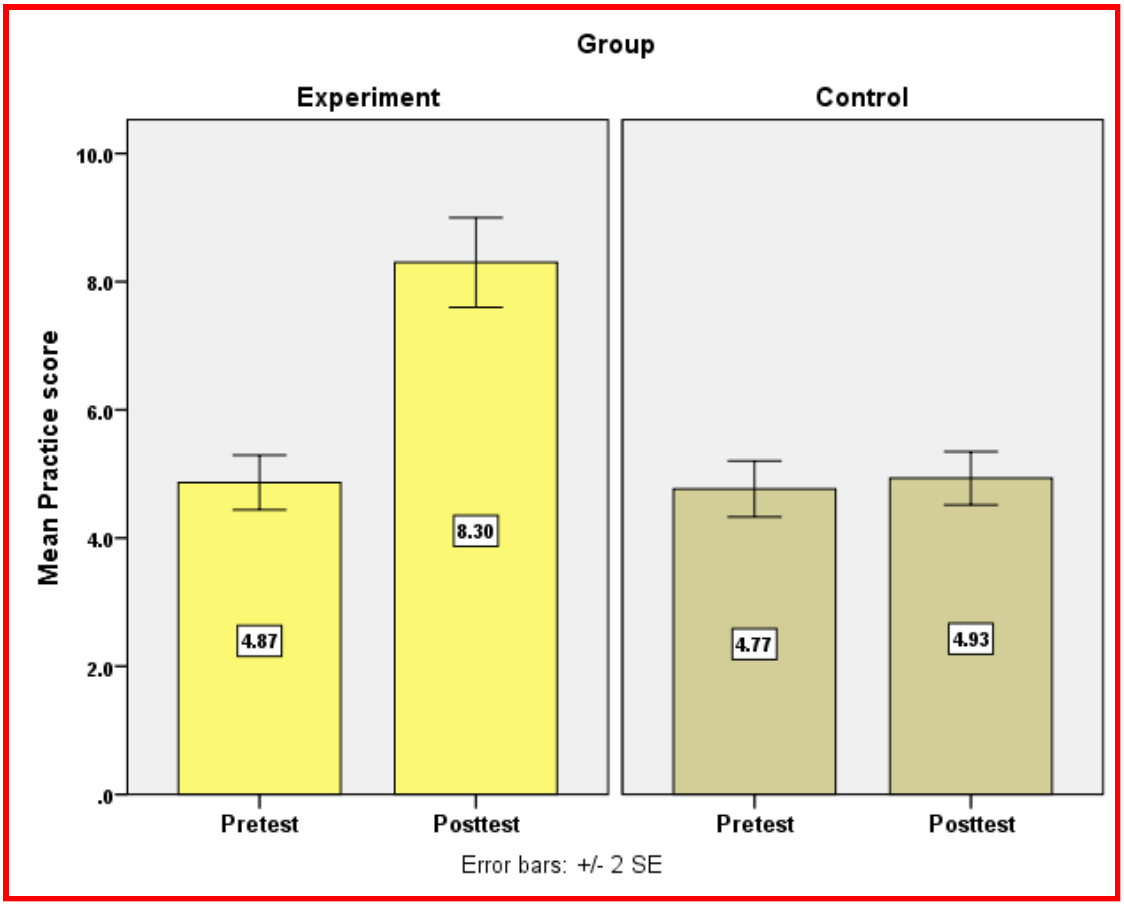


Fig 4.17: Simple bar with 2 standard error diagram compares the pre test and post test practice score among experiment and control group of adolescent girls.

Statistical test-1

H_1: There will be a significant difference between pretest and posttest level of knowledge and practices on prevention of urinary tract infection among adolescent girls.

Inference:

Here **H_1** is accepted. From the above test, it is seen that the 't' value of knowledge (**t=13.38**), 't' value of practice **(t=9.46)** is more than the table value for df= 29. Hence, There is a significant difference between pretest and posttest level of

knowledge and practices on prevention of urinary tract infection among adolescent girls.

Table 4.17: Correlation between Pre test knowledge and Practice score

	Correlation between	**Mean gain score Mean±SD**	**Karl pearson Correlation coefficients**	**Interpretation**
Experiment	Knowledge Vs practice	9.10±2.38 4.87±1.17	r= 0.18 P=0.39	poor correlation
Control	Knowledge Vs practice	9.37±2.79 4.77±1.19	r= 0.17 P=0.46	poor correlation

In pre test, considering correlation between experiment group knowledge score and practice score, there is no significant positive poor correlation between pre test knowledge score and practice score. It means knowledge increases their practice score also increases poorly

In pre test, considering correlation between control group knowledge score and practice score, there is no significant positive poor correlation between pre test knowledge score and practice score. It means knowledge increases their practice score also increases poorly.

Table 4.18: Correlation between Post test knowledge and Practice score

	Correlation between	Mean gain score Mean±SD	Karl pearson Correlation coefficients	Interpretation
Experiment	Knowledge Vs practice	16.10±2.52 8.30±1.91	r= 0.44 P=0.001***	There is no significant positive moderate correlation between post test knowledge score and practice score. It means knowledge increases their practice score also increases moderately
Control	Knowledge Vs practice	9.53±2.83 4.93±1.14	r= 0.19 P=0.34	There is no significant positive poor correlation between post test knowledge score and practice score. It means knowledge increases their practice score also increases poorly

In pre test, considering correlation between experiment group knowledge score and practice score, there is a significant positive moderate correlation between post test knowledge score and practice score. It means knowledge increases their practice score also increases moderately .

In pre test, considering correlation between control group knowledge score and practice score, there is no significant positive poor correlation between post test knowledge score and practice score. It means knowledge increases their practice score also increases poorly

Interpretation for r-value

Karl pearson correlation coefficient is denoted by "r"

"r" always lies between -1 to +1

0.0 – 0.2 Poor correlation

0.2 - 0.4 Fair correlation

0.4 - 0.6 Moderate correlation

0.6 – 0.8 Substantial correlation

0.8-1.0 Strong correlation

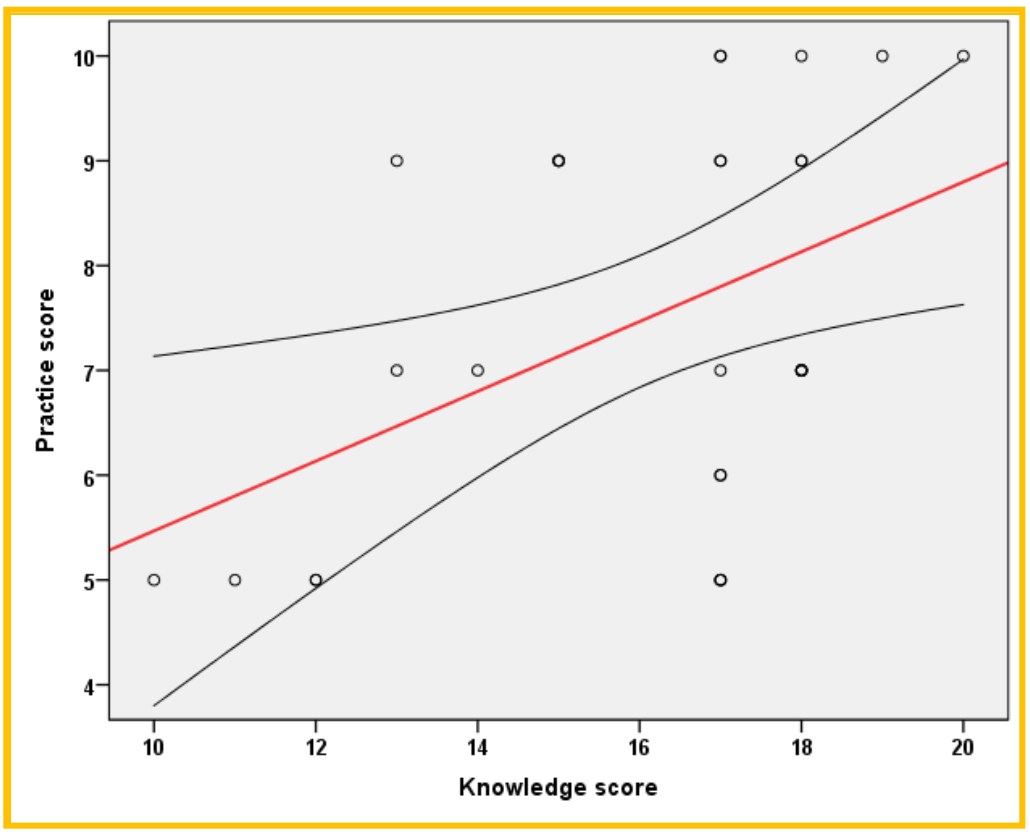


Fig 4. 18: Scatter diagram with regression estimate shows the moderate positive correlation between post-test knowledge and practice score among experiment group adolescent girls.

SECTION-F: ASSOCIATION BETWEEN THE POST TEST LEVEL OF KNOWLEDGE AND PRACTICES REGARDING PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AND THEIR SELECTED DEMOGRAPHIC VARIABLES

Table-4.19 : Association Between Post Test Level of Knowledge Score Among Adolescent Girls With Demographic Variables (Experiment)

Demographic variables		Post test level of knowledge score						samples	Chi-square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%		
Education	8th standard	0	0.00%	8	50.00%	8	50.00%	16	$\chi 2=6.53$ P=0.01** DF=1 (S)
	9th standard	0	0.00%	1	7.14%	13	92.86%	14	
	10th standard	0	0.00%	0	0.00%	0	0.00%	0	
	11th standard	0	0.00%	0	0.00%	0	0.00%	0	
Education status of mother	No formal education	0	0.00%	3	75.00%	1	25.00%	4	$\chi 2=8.95$ P=0.05* DF=3 (S)
	Primary education	0	0.00%	3	60.00%	2	40.00%	5	
	Secondary education	0	0.00%	3	17.65%	14	82.35%	17	
	Graduate	0	0.00%	0	0.00%	4	100.00%	4	
Number of times you had signs and symptoms of urinary tract infection	None	0	0.00%	6	60.00%	4	40.00%	10	$\chi 2=7.58$ P=0.05* DF=2 (S)
	One time	0	0.00%	3	23.08%	10	76.92%	13	
	Two times	0	0.00%	0	0.00%	7	100.00%	7	
	> Two times	0	0.00%	0	0.00%	0	0.00%	0	

Fig-4.19: Association Between Posttest Level of Knowledge Score And Adolescent Girls Education Level (Experiment)

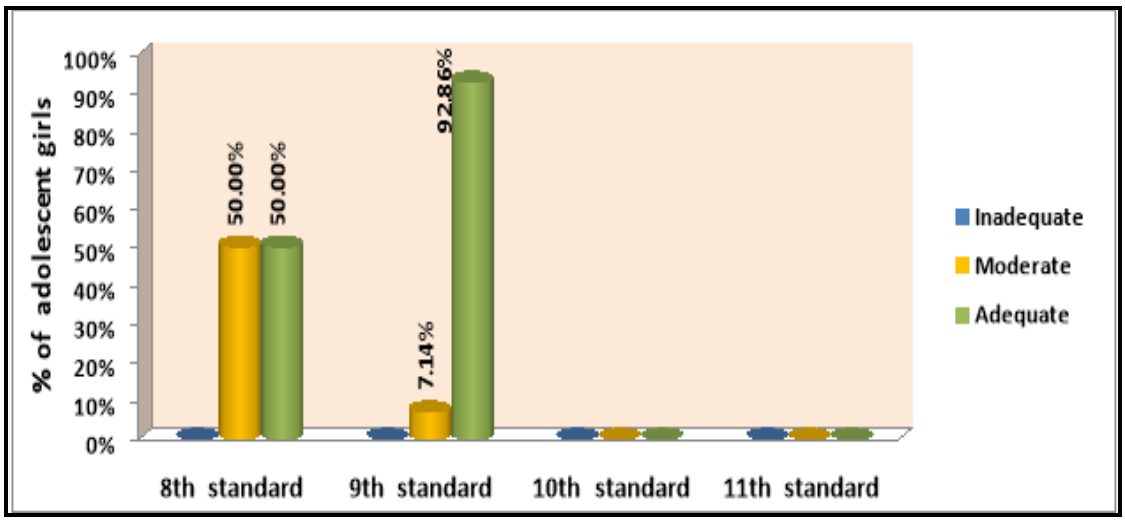


Fig-4.20: Association Between Posttest Level of Knowledge Score And Adolescent Girls Mothers Education Status (Experiment)

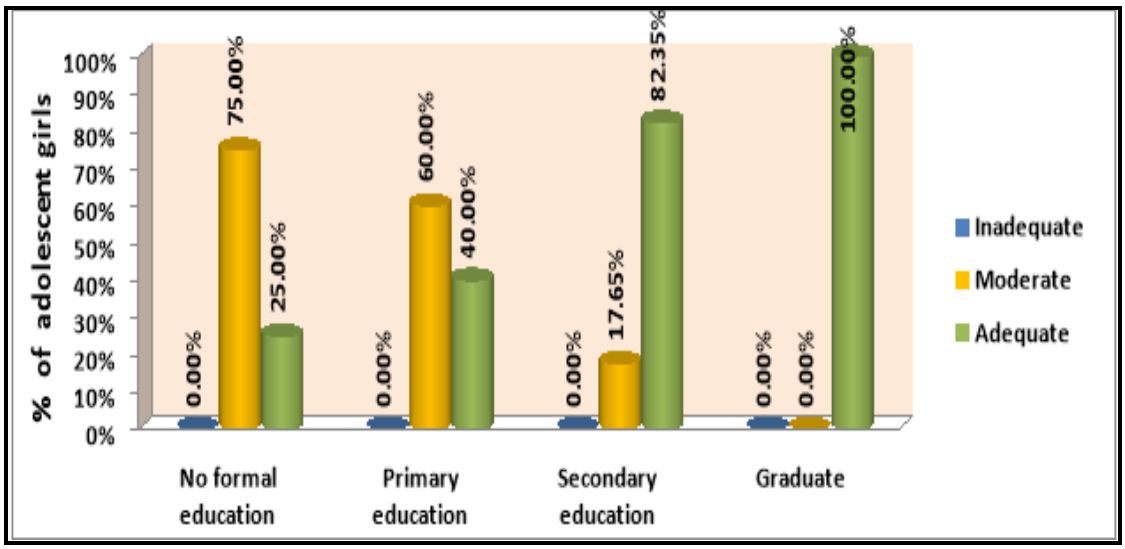


Fig-4.21: Association Between Posttest Level of Knowledge Score And Adolescent Girls Signs And Symptoms of UTI(Experiment)

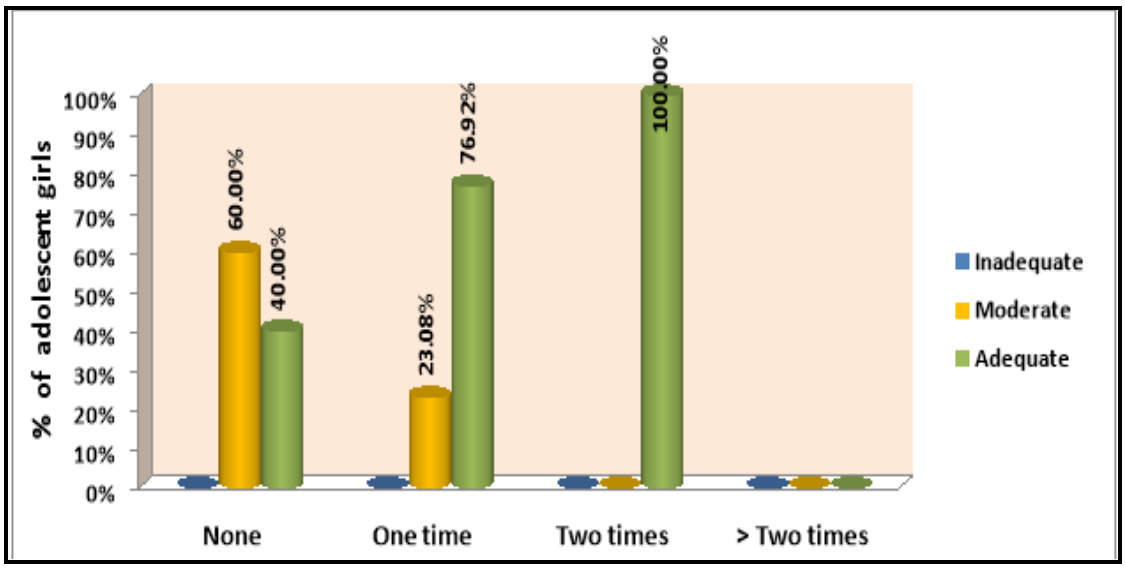


Table 4.19.shows the association between post test level of knowledge score and adolescent girls demographic variables among experimental group. 9th standard students, more educated mothers adolescent girls and already had signs and symptoms of urinary tract infection adolescent girls are benefitted more adequate level of knowledge score than others. It was confirmed using chi square test.

Table4.20: Association Between Post Test Level of Practice Score And Adolescent Girls Demographic Variables (Experiment)

Demographic variables		Post test level of practice score						samples	Chi-square test
		Poor		Moderate		Good			
		n	%	n	%	n	%		
Education	8th standard	0	0.00%	7	43.75%	9	56.25%	16	$\chi 2=5.11$ P=0.05* DF=1 (S)
	9th standard	0	0.00%	1	7.14%	13	92.86%	14	
	10th standard	0	0.00%	0	0.00%	0	0.00%	0	
	11th standard	0	0.00%	0	0.00%	0	0.00%	0	
Education status of mother	No formal education	0	0.00%	3	75.00%	1	25.00%	4	$\chi 2=11.06$ P=0.05* DF=3 (S)
	Primary education	0	0.00%	3	60.00%	2	40.00%	5	
	Secondary education	0	0.00%	2	11.76%	15	87.24%	17	
	Graduate	0	0.00%	0	0.00%	4	100.00%	4	
Number of times you had signs and symptoms of urinary tract infection	None	0	0.00%	6	60.00%	4	40.00%	10	$\chi 2=9.07$ P=0.01** DF=2 (S)
	One time	0	0.00%	2	15.38%	11	84.62%	13	
	Two times	0	0.00%	0	0.00%	7	100.00%	7	
	> Two times	0	0.00%	0	0.00%	0	0.00%	0	

Statistical test-2

H_2: There will be a significant association between posttest level of knowledge and practices regarding prevention of urinary tract

infection among adolescent girls and their selected demographic variables

Inference:

Here $\mathbf{H_2}$ is accepted. From the table it is seen that, as p value is $\leq$ 0.05 there is significant association between the posttest level of knowledge and practices on prevention of urinary tract infection among adolescent girls and their selected demographic such as education status of adolescent girls,mother education status,had signs and symptoms of urinary tract infection adolescent girls.

Fig-4.22: Association Between Posttest Level Of Practice Score And Adolescent Girls Education Level (Experiment)

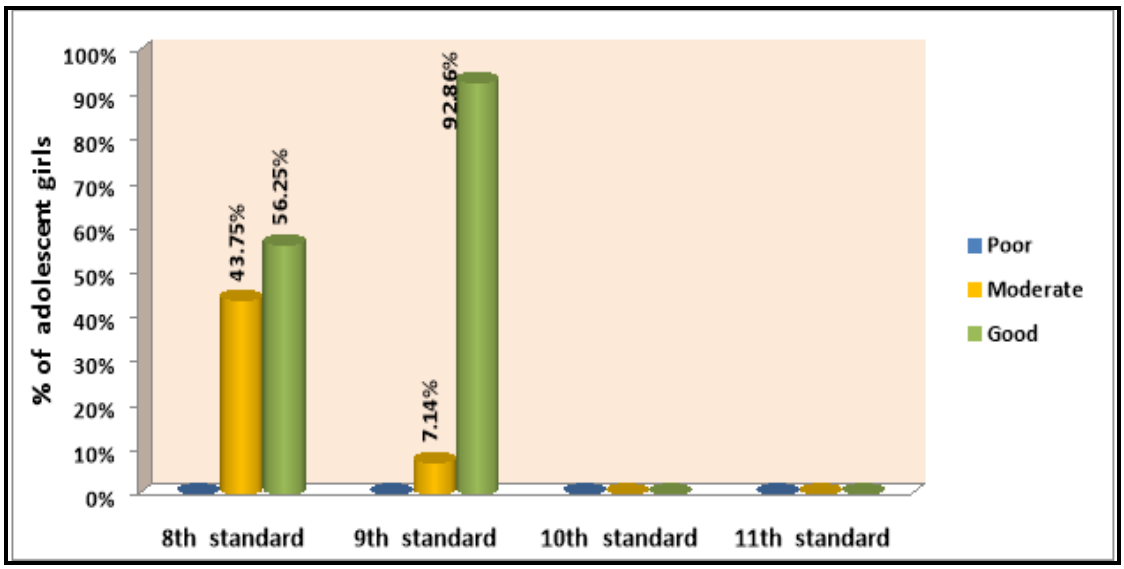


Fig-4.23: Association Between Posttest Level Of Practice Score And Adolescent Girls Mothers Education Status (Experiment)

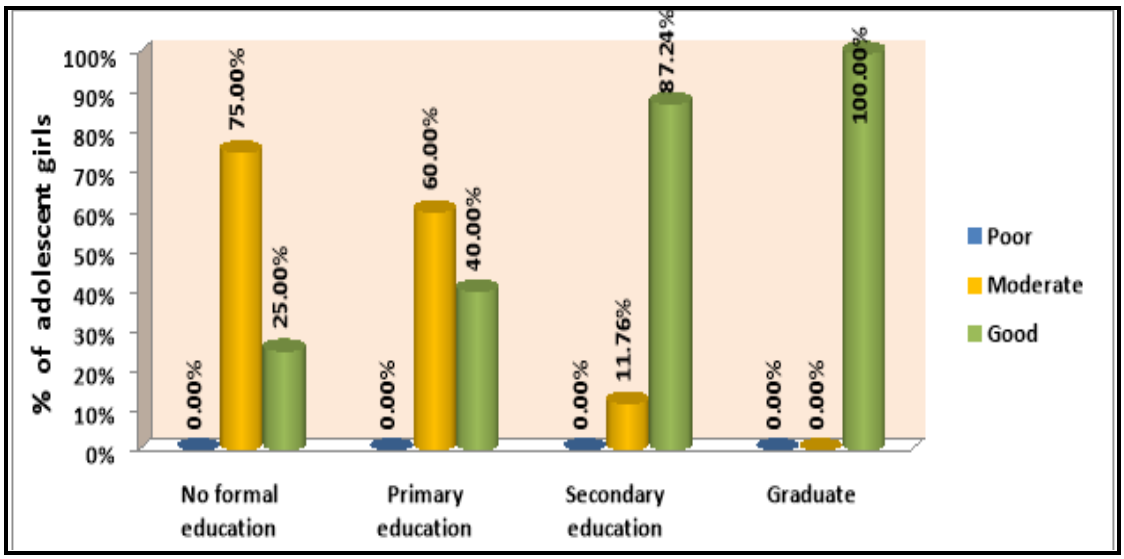


Fig-4.24: Association Between Posttest Level Of Practice Score And Adolescent Girls Signs And Symptoms Of UTI (Experiment)

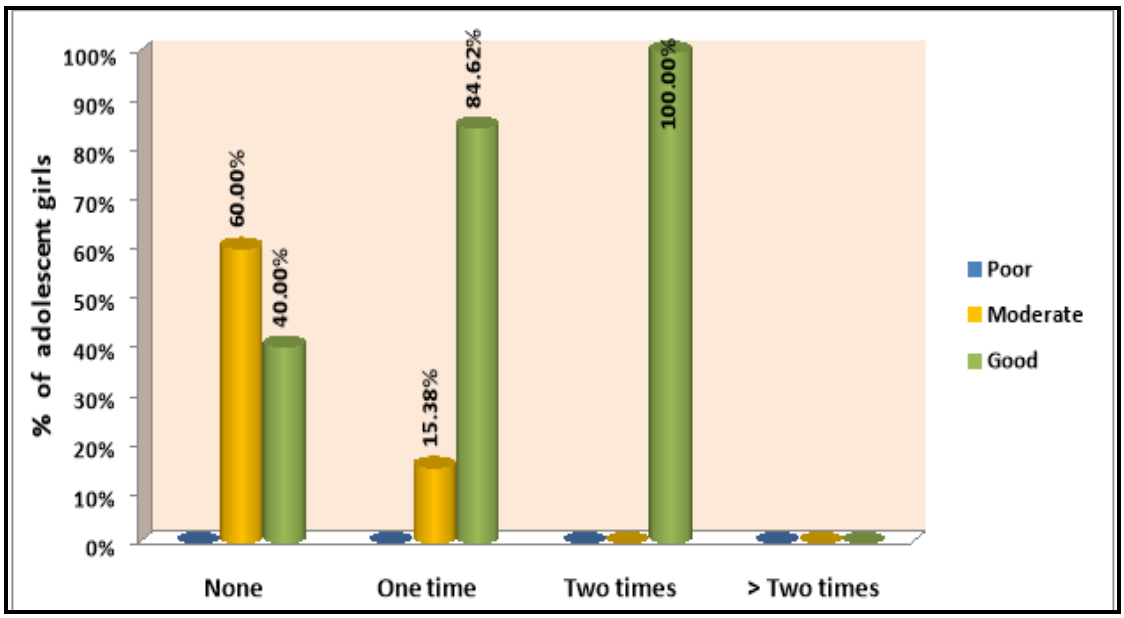


Table 4.20. shows the association between post test level of practice score and adolescent girls demographic variables among experimental group. 9th standard students, more educated mothers adolescent girls and already had signs and symptoms of urinary tract infection adolescent girls are benefitted more good level of practice score than others. It was confirmed using chi square test.

CHAPTER-V
DISCUSSIONS

This chapter deals with the discussion of the results of data analysed bases on the objective of the study. The purpose of the study is to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among the adolescent girls in selected government school Chennai. The objectives of the study are To assess the pre test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group.To evaluate the impact of community health nurse initiated packages on knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental group.To compare the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group.To find out associate between the post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls with their selected demographic variables.The study was done in Chennai girls higher secondary school, Rotlers street , chennai . Using quasi experimental Non Randamoised Control group design with 60 sample. The data was analysed using descriptive and inferential statistics.

FINDINGS BASED ON DEMOGRAPHIC VARIABLES

- Maximum (27) 90% of the students belongs to age group of 13-14 years in experimental group, (28) 93.3% of the students belongs to age group of 13-14 years in control group

- Majority of the students (16) 53.33% were 8^{th} standard in experimental group and (18) 60% were 9^{th} standard in control group

- Majority of the Mother education of the students 17 (56.67%) were secondary education in experimental group and (15) 50% were secondary education in control group

- Maximum (16) 53.33% of student's mothers were house worker in experimental group and (16) 53.33% of student's mothers were house worker in control group.

- Maximum (19) 63.33% of student's fathers were self employee in experimental group and (17) 56.67% of student's fathers were self employee in control group

- Majority of the students about (15) 50%were earning (Rs.5,000 – 10,000) per month as family income in experimental group and (12) 40%were earning (Rs.5,000 – 10,000) per month as family income in control group

- Majority of the students (17) 56.67% belongs to Hindu in experimental group and (21) 56.67% belongs to Hindu in control group

- Majority of the students (20) 66.67% belongs to nuclear family in experimental group and (19) 63.33% belongs to nuclear family in control group

- Majority of the students (15) 50% belongs to knowledge of hygiene practice taught by parents in experimental group and (11) 36.67% belongs to knowledge of hygiene practice taught by parents in control group

- Majority of the students (13) 43.33% had one time of signs and symptoms of urinary tract infection in experimental group and (15) 50% had one time of signs and symptoms of urinary tract infection in control group

FINDING BASED ON THE OBJECTIVES

Objective-1: To assess the pre test level of knowledge and practices on prevention of urinary tract infection among adolescent girls in experimental and control group.

The present study analysis shows that pre-test percentage of knowledge and practices regarding prevention of urinary tract infection among adolescent girls at selected government school,Chennai. In experimental group are having adequate knowledge 6.67% and moderate knowledge 43.33%, inadequate knowledge 50% and In practice 6.67% having good practice, 605 having moderate practice and 33.33% having poor practice and In control group 10% having adequate knowledge and 3.33% having moderate knowledge and 46.67% having inadequate knowledge.In practice 10% having good practice, 60% having moderate practice and 30% having poor practice.

Nimmy Saji et al. (2018) conducted was pre experimental one group pre-test post-test design on examines the effectiveness of structured teaching program on prevention of UTI among 60 adolescent girls(13-19 years) at MIMS College of Nursing Puthukode. In pretest score, about 25% of samples had good knowledge in pretest, 71.6% had average knowledge and 3.3% had poor knowledge. After teaching program (posttest) 85% had good knowledge and 15% had average knowledge. There is no significant association between knowledge regarding prevention of UTI and demographic variables. As it is a problem focused among the adolescent girls might support to reduce the occurrence of UTI.

Bokolia.R.(2016) conducted a descriptive study was evaluate the insight about the knowledge of UTI among school going adolescent girls.The study was done with 307 females aged between the(12-16 years)of school going adolescent girls.The result revealed that, out of 107 school going adolescent girls, 202(65.79%) had no knowledge and

105(34.21%) due to history had knowledge.The questions concerning hygiene, it was discussed that out of total assessed population 121(39.41%) wash their vaginal area after urination, where as 186(60.58%) are not washing , further 270(87.94%) girls change sanitary pads more than 1 time in a day during menstruation ,It is also found that 156(50.81%) girls consult physician of urinary tract infection symptoms occur.

From the above discussion it is understand that the majority of the adolescent lacks knowledge and practices regarding prevention of urinary tract infection which seeks the need for the development of education programme for the adolescent girls.

Objective-2 :To evaluate the impact of community health nurse initiated packages on knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental group

The statistical analysis of the present study has showed that there is significant difference between the pre test knowledge and practice score and the post test knowledge and practice score. On an average,adolescent girls are improved their knowledge score from 9.10 to 16.10 and improved practice score 4.87 to 8.30 after the administration of community health nurse initiated packages. Or we can say , in pre test they are able to answer only 9 questions before administration of community health nurse initiated packages after administration of community health nurse initiated packages they are able to answer upto 16 question regarding knowledge .Due to community health nurse initiated packages they are able to answer 7 more questions correctly. Or we can say , in pre test they are able to answer only 5 questions before administration of community health nurse initiated packages after administration of community health nurse initiated packages they are able to answer upto 8 questions regarding practice. Due to community health nurse initiated packages they are able

to answer 3 more questions correctly This difference is statistically significant. Statistical significance was calculated by using student's paired 't'test. In experimental group, in pre test, 50.00% of them are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 6.67% of them are having adequate score.In post test ,none of them are having inadequate level of knowledge score, 26.67% of them having moderate level of knowledge score ,73.33% of them are having adequate level of knowledge score. Statistically there is a significant difference between pre-test and post-test score. In experimental group, in pre test, 33.33% of them are having poor level of practice score and 60.00% of them having moderate level of practice score and 6.67% of them are having adequate score. In post test ,none of them are having inadequate level of practice score, 26.67% of them having moderate level of practice score ,73.33% of them are having adequate level of practice score. Statistically there is a significant difference between pre-test and post-test score.Pre test and post test practice score was calculated using Extended McNemar's test.

Rakhi Gaur (2018) conducted a true experimental design was to evaluate the effectiveness planned teaching programme on knowledge and practice regarding prevention of UTI among 100 adolescent girls at selected school in Udaipur(Rajasthan). The findings reveal that majority of adolescent girls (49%) belonged to the age group of 15-16 years and were Hindu (50%). The mean pre-test knowledge score was in experimental group 12.04±3.29 and control group11.38±3.28 respectively while the mean pre-test practice score was in experimental group 12.94±2.85 and control group11.82±2.48 respectively. The level of knowledge and practice regarding prevention of UTI of subjects who were exposed to PTP was significantly better than that of the control group at 0.05 level of significance. However, there is positive correlation between pretest knowledge and practice scores of adolescent

girls in both groups. Pretest level of knowledge of adolescent girls and place of residence whereas, practice and educational status of parents was significantly associated. The results of the study concluded that the knowledge and practice of adolescent girls could be improved by providing PTP.

Sonia Rosaline Blanch D'Souza (2016) One group pre-test post-test design was adopted to study the effectiveness of an information booklet on urinary tract infection among 45 adolescent girls at a selected school Udupi. Convenience sampling technique was used to select the sample. The tools of the study included a knowledge questionnaire and background information. The findings of the study revealed that the mean post-test knowledge score (28.31) was higher than the mean pre-test knowledge score (15.35). The 't' test computed between pre-test and post-test showed that there was significant difference in the pre-test and post-test knowledge score (t_{44}=33.40, P<0.05). The researcher concluded that there was significant gain in knowledge after the introduction of the information booklet.

Zahra Ahmadi et al (2020) was conducted randamoized control trials to assess the effect of educational intervention program on promoting preventive behaviors of urinary tract infection in girls among 100 mothers of children. The study conclude that TPB –based education with active and interventional follow-up was effective in promoting the preventive behaviors of urinary tract infection.

Objective-3 :To compare the pre test and post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls in experimental and control group

The present study result that level of knowledge and practices in pre test and post test.

Considering In experimental group, in pre test, (15) 50.00% of them are having inadequate level of knowledge score and (13) 43.33% of them having moderate level of knowledge score and (2) 6.67% of them are having adequate score.In post test ,none of them are having inadequate level of knowledge score, (8) 26.67% of them having moderate level of knowledge score ,(22) 73.33% of them are having adequate level of knowledge score. In practice, in pre test, (10) 33.33% of them are having poor level of practice score and (18) 60.00% of them having moderate level of practice score and (2) 6.67% of them are having adequate score. In post test ,none of them are having inadequate level of practice score,(8) 26.67% of them having moderate level of practice score ,(22) 73.33% of them are having adequate level of practice score. Statistically there is a significant difference between pre-test and post-test score.hence the hypothesis(H_1) accepted.Pre test and post test practice score was calculated using Extended McNemar's test.

Considering In control group, In control, in pre test, 46.67% of them are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 10.00% of them are having adequate score. In post test ,40.00% of them are having inadequate level of knowledge score, 50.00% of them having moderate level of knowledge score ,10.00% of them are having adequate level of knowledge score. In practice in pre test, 30.00% of them are having poor level of practice score and 60.00% of them having moderate level of practice score and 10% of them are having good level of practice score.In post test ,23.33% of them are having poor level of practice score, 66.67% of them having moderate level of practice score ,10.00% of them are having good level of practice score. Statistically there is no significant difference between pre-test and post-test score.Pre test and post test practice score was calculated using Extended McNemar's test.

Rakhi Gaur (2018) conducted a true experimental design was to evaluate the effectiveness planned teaching programme on knowledge and practice regarding prevention of UTI among 100 adolescent girls at selected school in Udaipur(Rajasthan). The findings reveal that majority of adolescent girls (49%) belonged to the age group of 15-16 years and were Hindu (50%). The mean pre-test knowledge score was in experimental group 12.04±3.29 and control group11.38±3.28 respectively while the mean pre-test practice score was in experimental group 12.94±2.85 and control group11.82±2.48 respectively. The level of knowledge and practice regarding prevention of UTI of subjects who were exposed to PTP was significantly better than that of the control group at 0.05 level of significance. However, there is positive correlation between pretest knowledge and practice scores of adolescent girls in both groups. Pretest level of knowledge of adolescent girls and place of residence whereas, practice and educational status of parents was significantly associated. The results of the study concluded that the knowledge and practice of adolescent girls could be improved by providing PTP.

Sonia Rosaline Blanch D'Souza (2016) One group pre-test post-test design was adopted to study the effectiveness of an information booklet on urinary tract infection among 45 adolescent girls at a selected school Udupi. Convenience sampling technique was used to select the sample. The tools of the study included a knowledge questionnaire and background information. The findings of the study revealed that the mean post-test knowledge score (28.31) was higher than the mean pre-test knowledge score (15.35). The 't' test computed between pre-test and post-test showed that there was significant difference in the pre-test and post-test knowledge score (t_{44}=33.40, P<0.05). The researcher concluded that there was significant gain in knowledge after the introduction of the information booklet.

Nimmy Saji et al. (2018) conducted was pre experimental one group pre-test post-test design on examines the effectiveness of structured teaching program on prevention of UTI among 60 adolescent girls(13-19 years) at MIMS College of Nursing Puthukode. In pretest score, about 25% of samples had good knowledge in pretest, 71.6% had average knowledge and 3.3% had poor knowledge. After teaching program (posttest) 85% had good knowledge and 15% had average knowledge. There is no significant association between knowledge regarding prevention of UTI and demographic variables. As it is a problem focused among the adolescent girls might support to reduce the occurrence of UTI.

The discussion of the post test level of knowledge and practice score and its comparison with the pre test knowledge and practice proves that through the community health initiated packages in the school , the knowledge and practice of the adolescent girls on prevention of urinary tract infection can be improved.Hence H_1 was accepted.

Objective-4 :To find out associate between the post test level of knowledge and practices regarding prevention of urinary tract infection among adolescent girls and their selected demographic variables.

The present study results showed that there is a significant association between the education of the adolescent girls, educational status of the mother, and had times of sign and symptoms of UTI are the factors significantly associated with the knowledge and practice score. Statistical significance was calculated using chi square test.

The study concluded that there is a association between post test knowledge score is statistically significant [$p<0.05$] with their education of the adolescent girls [$x2 = 6.53$ $p=0.01$]. practice score statistically significant [$p<0.05$] with their age [$x2 = 5.11$ $p=0.05$] is it means

education of the adolescent girls increases the knowledge and practices among adolescent girls.

The study concluded that there is a association between post test knowledge score is statistically significant [p<0.05] with their education status of students mother [x2 =78.95 p=0.05]. practice score is statistically significant [p<0.05] with their education status of students mother [x2 =11.06 p=0.05 it means education status of students mother increases the knowledge and practice among adolescent girls

The study concluded that there is a association between post test knowledge score is statistically significant [p<0.05] with had times of signs and symptoms of UTI [x2 =7.58 p=0.05].practice score is statistically significant [p<0.05] with had times of signs and symptoms of UTI [x2 =9.07 p=0.01] it means had signs and symptoms of UTI increases the knowledge and practice among adolescent girls.

Akshara.P.I et al. (2016) conducted a descriptive study to assess the knowledge regarding urinary tract infection among 60 adolescent girls(16-17 years) of Karthika Thirunal Govt. Vocational & Higher Secondary School for Girls, Manacaud, Thiruvananthapuram. Analysis reveals that 40% adolescent girls have poor knowledge, 35% have average knowledge and 25% have good knowledge regarding urinary tract infection. On analysis of data there is a significant statistical relationship between the level of knowledge and selected demographic variables such as age, area of residence, socio economic status, voiding during school hours and cleanliness of toilets in schools. But there is no statistical relationship between education of mother and sources of information.

Kripa,C.K et al (2016) was conducted non experimental descriptive study was carried out to assess the knowledge on prevention of urinary tract infection among 30 adolescent girls in selected nursing

college. The present study reveals that out of 30 samples 93% have average knowledge, 7% have inadequate knowledge and no one have adequate knowledge. There is no association between knowledge of prevention of urinary tract infection and selected demographic variables like monthly income, area of residence, type of family, history of urinary tract infection.

Above the discussion shows that the education status of the adolescent girls, education status of students mother , had signs and symptoms of UTI are associated with the knowledge and practice.

The analysis revealed that there was a significant association between post test level of knowledge and practice and their selected demographic variable. Hence H_2 was accepted

From the above discussion of the present study with other similar studies justifies that there is a lack of knowledge and practice on prevention of urinary tract infection among adolescent girls. The education was planned through community health nurse initiated packages for students on prevention of urinary tract infection to gain adequate knowledge and practice and then some was accomplish. The results of this study highlighted the impact of community health nurse initiated packages strategy on prevention of urinary tract infection. Therefore the student to be ergonomically conscious and they can prevent urinary tract infection.

CHAPTER –VI
SUMMARY, IMPLICATIONS, RECOMMENDATION, LIMITATION AND CONCLUSION

This chapter deals with the summary, implication, Recommendation, Limitation and Conclusion.

6.1 SUMMARY OF THE STUDY FINDINGS

The study was conducted to ascertain the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls in selected government scool,Chennai. It was a quantitative approach. The main objectives of the study is to assess the effectiveness of community health nurse initiated packages with non randamoized control group design. The study was conducted at Chennai girls Higher Secondary School, Rotlers street,Chennai. 60 school children were included in the study based on the inclusion criteria. Semi structured questionnaire was used to determine the level of knowledge and practice among school going adolescent girls. The pilot study was conducted in Chennai girls Higher Secondary School, Rotlers street,Chennai with 6 adolescent girls. No modifications were made after pilot study.

The review of literature provided the base to construct the tools to select the methodology. The conceptual framework of the study was based on the modified model of wiedenbach' helping art of clinical nursing theory(1964). Data was collected in 4 weeks from 20.01.2020 to 15.02.2020. Initially the investigator got formal permission from Chennai girls Higher Secondary School, Rotlers street,Chennai Informed written consent was obtained from each sample after explaining the purpose of the study and was given assurance for keeping the information confidentially. The data was collected by using a purposive sampling technique. The knowledge and practice regarding

urinary tract infection was assessed by semi- structured knowledge and practice questionnaire. Community health nurse initiated packages regarding prevention of urinary tract infection was given to the samples after the knowledge and practice assessment to improve the knowledge and practice. Data analysis was done by using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY

6.1.1 Findings related to demographic variables

- Maximum (27) 90% of the students belongs to age group of 13-14 years in experimental group, (28) 93.3% of the students belongs to age group of 13-14 years in control group

- Majority of the students (16) 53.33% were 8th standard in experimental group and (18) 60% were 9th standard in control group

- Majority of the Mother education of the students 17 (56.67%) were secondary education in experimental group and (15) 50% were secondary education in control group

- Maximum (16) 53.33% of student's mothers were house worker in experimental group and (16) 53.33% of student's mothers were house worker in control group.

- Maximum (19) 63.33% of student's fathers were self employee in experimental group and (17) 56.67% of student's fathers were self employee in control group

- Majority of the students about (15) 50%were earning (Rs.5,000 – 10,000) per month as family income in experimental group and (12) 40%were earning (Rs.5,000 – 10,000) per month as family income in control group

- Majority of the students (17) 56.67% belongs to Hindu in experimental group and (21) 56.67% belongs to Hindu in control group

- Majority of the students (20) 66.67% belongs to nuclear family in experimental group and (19) 63.33% belongs to nuclear family in control group

- Majority of the students (15) 50% belongs to knowledge of hygiene practice taught by parents in experimental group and (11) 36.67% belongs to knowledge of hygiene practice taught by parents in control group

- Majority of the students (13) 43.33% had one time of signs and symptoms of urinary tract infection in experimental group and (15) 50% had one time of signs and symptoms of urinary tract infection in control group

6.1.2 Findings regarding pre test level of knowledge and practice

In experimental group, in pre test, 50.00% of them are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 6.67% of them are having adequate score and in practice in experimental group, in pre test, 33.33% of them are having poor level of practice score and 60.00% of them having moderate level of practice score and 6.67% of them are having adequate score and In control group ,46.67% of the adolescent girls are having inadequate level of knowledge score and 43.33% of them having moderate level of knowledge score and 10% of them are having adequate level of knowledge score.30.00% of the adolescent girls are having poor level of practice score, 60.0% of them having moderate level of practice score and 10.00% of them are having Good level of practice score .

6.1.3 Findings regarding post test level of knowledge and practice

In post test, in experimental group ,none of the adolescent girls are having inadequate level of knowledge score and 30.00% of them having moderate level of knowledge score and 70.00% of them are having adequate level of knowledge score and none of the adolescent girls are having poor level of practice score, 26.67% of them having moderate level of practice score and 73.33% of them are having Good level of practice score .In control group ,40.00% of the adolescent girls are having inadequate level of knowledge score and 50.00% of them having moderate level of knowledge score and 10.00% of them are having adequate level of knowledge score and 23.33% of the adolescent girls are having poor level of practice score, 66.67% of them having moderate level of practice score and 10.00% of them are having Good level of practice score .

6.1.4 Finding related to impact of community health nurse initiated packages

Area wise knowledge and practice regarding prevention of urinary tract infection showed that out of 60 samples. On an average, adolescent girls are improved their knowledge score from 9.10 to 16.10 and improved practice score 4.87 to 8.30 after the administration of community health nurse initiated packages.

6.1.5 Findings related to association with demographic variables

- There was significant association with community health nurse initiated packages regarding prevention of urinary tract infection with their education of the adolescent girls [x2 =6.53 p=0.01*].
- practice score statistically significant [p<0.05] with their education of the adolescent girls [x2 =5.11 p=0.05*]

- There was significant association with community health nurse initiated packages regarding prevention of urinary tract infection with their education status of students mother [x2 =78.95 p=0.05*].

- practice score is statistically significant [p<0.05] with their education status of students mother [x2 =11.06 p=0.05*].

- There was significant association with community health nurse initiated packages regarding prevention of urinary tract infection with had times of signs and symptoms of UTI [x2 =7.58 p=0.05*].

- practice score is statistically significant [p<0.05] with had times of signs and symptoms of UTI [x2 =9.07 p=0.01*] .

6.2 IMPLICATIONS

The investigator has drawn the following implications from the studies which are of vital concern in the field of nursing practice, nursing education, nursing administration and nursing research.

6.2.1 IMPLICATIONS FOR NURSING PRACTICE

- The study result will help the nursing personnel to understand the importance preventive measures of urinary tract infection among the adolescent girl.

- The school health nurse can motivate the school student to follow the proper preventive measure of urinary tract infection.

- The nurse can emphasize on the drink plenty water, practice front to back perineal wash and take vitamin c rich juices ,avoid the heated pads, to prevent the urinary tract infection.

- Community health nurse plays a vital role in providing behaviour change communication in the schools to adopt the appropriate

preventive measure to prevent the urinary tract infection and its complication.

- Health education regarding the general information of urinary tract infection, etiology factors, signs and symptoms,and preventive measures and complication of urinary tract infection it will help the school students.

6.2.2 IMPLICATIONS FOR NURSING EDUCATION

- To improve the knowledge in the community student nurses need to update with their knowledge on prevention of urinary tract infection.

- Student nurses in the nursing colleges should be encouraged to conduct mass educational campaigns on prevention of urinary tract infection in schools at community area.

- Educative materials like hand-outs can be prepared by the nursing students to create awareness among the adolescent how to prevent the urinary tract infection and gain knowledge to prevent urinary tract infection themself also.

6.2.3 IMPLICATIONS FOR NURSING ADMINISTRATION

- Nursing administrators should organize In service programme on urinary tract infection and its preventive measures.

- Periodic workshops, conferences, and exhibitions can be arranged by the community health nurse at school level in prevention of urinary tract infection

- Standard protocols on assessing the knowledge and practice and imparting the update knowledge can be prepared for the health workers at primary level to impart the best knowledge to the community.

6.2.4 IMPLICATIONS FOR NURSING RESEARCH

- ❖ Promote more research activities on prevention of urinary tract infection. Knowledge, attitude and practice can be assessed applying various research designs.
- ❖ This study will be helpful to plan new interventional studies to improve the knowledge regarding prevention of urinary tract infection.
- ❖ Develop different tools to assess the knowledge on prevention of urinary tract infection
- ❖ Disseminate the research findings in journals, seminars and conferences.
- ❖ Various domains on urinary tract infection and its effects can be assessed by applying different type of studies.

6.3 RECOMMENDATIONS FOR FURTHER STUDY

1) The study can be repeated on the large sample for better generalization of the findings.
2) A descriptive study on assessing the knowledge, attitude and practice on prevention of urinary tract infection can be done.
3) The similar study can be done to test the effectiveness of various teaching aids in imparting knowledge on prevention urinary tract infection among adolescent girls.
4) The study can be repeated among the mothers of under five children, pregnant women, boys .

5) The same study can be done as a comparative study to assess the knowledge, attitude and practice on prevention of urinary tract infection between government and private school adolescent age group.

6) The study can be done in control measures aspect of urinary tract infection

6.4 LIMITATIONS

- This study was basically conducted as community based study in school.
- The study was limited with fewer samples.
- Data collection is limited to four weeks.

6.5 CONCLUSION

The findings revealed that the community health nurse initiated packages was more effective with the adequate knowledge and practice gain score when compared to pretest knowledge and practice. further studies focusing on the attitude of adolescents girls regarding the prevention of urinary tract infection can be more useful. Enhanced knowledge and practice regarding urinary tract infection and its preventive measures should be used in developing highly effective educational programme in school areas.

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PREVENTION OF URINARY TRACT INFECTION

RESEARCH TOOL

SECTION 1-DEMOGRAPHIC VARIABLE PROFORMA

Kindly read the questions, Tick your responses, Responses will be kept confidential

1.Age

a) 13-14 years
b) 15-16years
c) 17-18 years
d) 19 years

2.Education

a) 8th standard
b) 9th standard
c) 10th standard
d) 11th standard

3. Education status of mother

a) No formal education
b) Primary education
c) Secondary education
d) Graduate

4. Occupation status of the mother

a) Self employee
b) Government employee
c) Private employee
d) House maker

5. Occupation status of the father

a) Self employee
b) Government employee
c) Private employee
d) Un employed

6. monthly income of the family

a) Rs. <5,000
b) Rs. 5000-10000
c) Rs. 10000-15000
d) Rs. >15000

7. Religion

a) Hindu
b) Christian
c) Muslim
d) others

8. Types of family

a) Nuclear family
b) Joint family
c) Extended family
e) Single parent

9. knowledge of Hygiene practice

a) Self
b) Parents
c) Friends
d) others

10. Number of times you had signs and symptoms of urinary tract infection

a) None
b) One time
c) Two times
d) More than 2 times

SECTION-II CLINICAL PROFILE

PART A-KNOWLEDGE QUESTIONNAIRE ON URINARY TRACT INFECTION

1.The part of urinary system is

a) Ureter
b) Uterus
c) Pancreas
d) Liver

2.The organ that is responsible for the formation of urine

a) Kidney
b) Ureter
c) Bladder
d) Urethra

3. The function of kidney

a) Respiration
b) Maintenance of urine output
c) Digestion
d) Maintenance of sensory perception

4. Urinary tract infection means

a) Presence of cyst in the urinary tract
b) Presence of micro organism within the urinary tract
c) Presence of swelling of the urinary tract
d) Presence of calculus in the urinary tract

5. Urinary tract infection caused by micro organism

a) Virus
b) Bacteria
c) Fungi
d) Parasites

6. Acute uncomplicated urinary tract infection more prevalence in

a) Schooler
b) Adolescents
c) Adults
d) Older

7.More susceptible to get urinary tract infection

a) Men
b) Women
c) Transgender
d) All the above

8. Common risk factors of adolescent girls to getting urinary tract infection

a) Poor hygiene
b) Weight gain
c) Poor exercise
d) Improper diet pattern

9.One of the major cause of urinary tract infection in school going adolescents

a) Unclean toilet
b) Inadequate water supply
c) Shyness to get permission
d) All of above

10.The appearance of urine during urinary tract infection

a) Yellow color
b) Milky color
c) Straw color
d) Amber color

11. How to determine the abdominal pain due to urinary tract infection

e) Upper abdominal pain
f) Supra pubic /lower back abdomen pain
g) Lower abdominal pain
h) Umbilicus pain

12.Signs and symptoms of urinary tract infection

a) Blood in urine
b) Burning / itching sensation while urinating
c) Foul smelling urine
d) None of above

13. Which types of Foods/ beverages help to worsen the symptoms of urinary tract infection

a) Colas
b) Alcohol
c) Spicy foods
d) All of above

14. Type of vitamin to help to prevent urinary tract infection

a) Vitamin A
b) Vitamin B
c) Vitamin C
d) Vitamin D

15. Vitamin C contain fruits

e) Berries, orange,kiwifruits,tomatoes
f) Apple,banana,carrots
g) Citrus fruits, bananas
h) Sapote,mango,grapes

16. Healthy habit related to prevent urinary tract infection

a) Frequency urinating
b) Taken spicy food
c) Use tight jeans
d) Drinking little amount of water

17. Some relief from urinary tract infection

a) A heating pad
b) Drinking plenty of fluids
c) A and B
d) Drinking colas

18. One of the best to prevent urinary tract infection

a) Babble bath
b) Use duoderants, feminine products
c) Shower bath
d) Using silk material inner wear

19. When will you consult the doctor

e) Cannot pass urine
f) Passing blood urine
g) Swelling in abdomen and difficulty urinating
h) All of above

20.If untreated the UTI it leads to worsen may produce

a) Stroke
b) Heart failure
c) Kidney damage
d) Diabetes mellitus

PART B-PRACTICE QUESTIONNAIRE ON URINARY TRACT INFECTION

S.NO	PRACTICE RELATED QUESTIONNAIRE ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS	YES ✓	NO ×
1	Do you drink water 3-4 liters per day?		
2	Do you pass urine for 6-10 times per day?		
3	Do you hand wash before and after for voiding and defecating?		
4	Do you use cotton underwear?		
5	Do you clean underwear daily?		
6	Do you flush your latrine before and after using it? (public & private toilet)		
7	Do you wash perineal area from front to back?		
8	Do you dry your perineal area after washing?		
9	Do you change sanitary pad once in 4 hours?		
10	Do you use perfumes / powders / soaps / perfumed toilet paper after toileting?		

ANSWER KEY

SECTION-II(PART-A)

Question number	Answer
1	A
2	A
3	B
4	B
5	A
6	B
7	B
8	A
9	D
10	A
11	B
12	D
13	D
14	C
15	A
16	A
17	B
18	C
19	D
20	C

<u>பகுதி-1 சமூகபுள்ளிமாறிவிவரங்கள்</u>

கீழேகொடுக்கப்பட்டுள்ளவினாக்களைபடித்துஉங்களின்பதிலைஅளிக்கவும்.
இந்த விவரங்கள்அனைத்தும்இரகசியமாக பாதுகாக்கப்படும்

1.வயது

அ) 13-14 வருடங்கள்
ஆ) 15-16 வருடங்கள்
இ) 17-18 வருடங்கள்
ஈ) 19 வருடங்கள்

2.கல்வித்தகுதி

அ) எட்டாம்வகுப்பு
ஆ) ஒன்பதாம்வகுப்பு
இ) பத்தாம்வகுப்ப
ஈ) பதினொன்றாம்வகுப்பு

3.தாயின்கல்வித்தகுதி

அ) முறையானகல்விஇல்லை
ஆ)ஆரம்பகல்வி
இ)இடைநிலைகல்வி
ஈ) பட்டப்படிப்பு

4.தந்தையின்கல்வித்தகுதி

அ) முறையானகல்விஇல்லை
ஆ)ஆரம்பகல்வி
இ)இடைநிலைகல்வி
ஈ) பட்டப்படிப்பு

5. தாயின்தொழில்

அ) சுயதொழில்செய்பவர்
ஆ) அரசாங்கஊழியர்
இ) தனியார்ஊழியர்
ஈ) குடும்பதலைவி

6. தந்தையின்தொழில்

அ) சுயதொழில்
ஆ) அரசாங்கஊழியர்
இ) தனியார்ஊழியர்
அ) வேலைஇல்லாதவர்

7.குடும்பமாதவருமானம்

அ) ரூ.5000மேல்

ஆ) ரூ. 5000 முதல் 10000 வரை

இ) ரூ.10000 முதல் 15000 வரை

ஈ) ரூ. 15000 க்கும்மேல்

8.மதம்

அ) இந்து

ஆ) கிறீஸ்துவம்

இ) முஸ்லீம்

ஈ) மற்றவை

9.குடும்பமுறை

அ) தனிகுடும்பம்

ஆ) கூட்டுகுடும்பம்

இ) நீடிக்கப்பட்டகுடும்பம்

ஈ) ஒற்றைபெற்றோர்

10.சுகாதாரமுறையையார்முலமாகக்கற்றுக்கொள்கிறீர்கள்

அ) தானாகவே

ஆ) பெற்றோர்மூலம்

இ) நண்பர்மூலம்

ஈ) மற்றவர்மூலம்

பகுதி-2

மருத்துவரீதியானதகவல்கள்

பிரிவு-அ.சிறுநீர்ப்பாதைத்தொற்றுபற்றியஅறிவுசார்ந்தவினாக்கள்

1.பின்வருவனற்றில்ஒருபகுதிசிறுநீரகமண்டலத்தைச்சார்ந்தது

அ)சிறுநீர்வடிக்குழாய்

ஆ) கர்ப்பப்பை

இ) கணையம்

ஈ) கல்லீரல்

2.சிறுநீர்உருவாவதற்குஏற்றஉறுப்பு

அ) சிறுநீரகம்

ஆ) சிறுநீர்வடிக்குழாய்

இ) சிறுநீர்ப்பை

ஈ) சிறுநீர்க்குழாய்திறப்பு

3.சிறுநீரகத்தின்பணீ

அ) சுவாசித்தல்

ஆ) சிறுநீர்வெளீயேற்றத்திற்குஉதவுகிறது

இ) செரிமானம்

ஈ) உணர்ச்சிமண்டலத்தைகட்டுபடுத்துகிறது

4.சிறுநீர்தொற்றுஎன்பதன்பொருள்

அ) சிறுநீர்ப்பாதையில்கட்டிஇருத்தல்

ஆ) சிறுநீர்ப்பாதையில்நோய்கிருமீஇருத்தல்

இ) சிறுநீர்ப்பாதையில்வீக்கம்இருத்தல்

ஈ) சிறுநீர்ப்பாதையில்கல்இருத்தல்

5.சிறுநீர்ப்பாதைத்தொற்றுஏற்படமுக்கியகாரணீ

அ) பாக்டீரியா

ஆ) வைரஸ்

இ) பூஞ்சை

ஈ) பாரசைட்

6.சிக்கலற்றசிறுநீர்த்தொற்றுக்கானஅதிகநோய்த்தாக்கம்வருவது

அ) பள்ளீபருவத்தினர்

ஆ) இளபருவம்

இ) வளர்பருவத்தினர்

ஈ) வயதானவர்

7.சிறுநீர்த்தொற்றுஅதிகம்வரயாருக்குவாய்ப்புள்ளது

அ) ஆண்கள்

ஆ) பெண்கள்

இ) திருநங்கைகள்

ஈ) அனைவருக்கும்

8.இவற்றுள்பொதுவாகஇளம்வயதுபெண்களுக்குசிறுநீர்ப்பாதைத்தொற்றுவருவதற்கானஆபத்துகாரணீகள்

அ) மோசமானசுகாதாரம்

ஆ) உடல்எடைகூடுதல்

இ) மோசமானஉடற்பயீற்சி

ஈ) முறையற்றஉணவுபழக்கம்

9.பள்ளிக்குசெல்லும்குழந்தைகளுக்குசிறுநீர்ப்பாதைத்தொற்றுஎற்படுவதற்கானமுக்கியகாரணம்

அ) சுத்தமற்றகழிப்பறை

ஆ) போதுமானதண்ணீர்வசதியில்லை

இ) அனுமதிகேட்கக்கூச்சம்

ஈ) அனைத்தும்

10. சிறுநீர்ப்பாதைத்தொற்றுஇருப்பின்வெளியேற்றப்படும்சிறுநீரின்நிறம்

அ) மஞ்சள்நிறம்

ஆ) பால்போன்றநிறம்

இ) வைக்கோல்நிறம்

ஈ) ஆம்பர்நிறம்

11 .சிறுநீர்ப்பாதைத்தொற்றால்வரும்வயிறுவலிஎப்படிஇருக்கும்.

அ) மேல்வயிறுவலி

ஆ) கீழ்பின்புறவயிறுவலி

இ) கீழ்வயிறுவலி

ஈ) தொப்புள்வலி

12.கீழ்கண்டவற்றுள்சிறுநீர்ப்பாதைத்தொற்றுக்கானஅறிகுறிகள்ஏதேனும்வந்துள்ளதா

அ) சிறுநீரில்இரத்தம்

ஆ) சிறுநீர்வெளியேற்றும்போதுஅரிப்பு,எரிச்சல்

இ) சிறுநீர்க்கழிக்கும்போதுதுர்நாற்றம்

ஈ) ஏதுமில்லை

13.சிறுநீர்ப்பாதைத்தொற்றுவராமல்இருக்கதவிர்க்கவேண்டியஉணவுகள்மற்றும்குளிர்பானங்கள்

அ) கோலாஸ்

ஆ) சாராயம்

இ) காராமானஉணவு

ஈ) அனைத்தும்

14.சிறுநீர்ப்பாதைத்தொற்றுதடுக்களந்தவகைவைட்டமின்கள்நிறைந்தஉணவுகளைஉண்ணவேண்டும்

அ) வைட்டமின்ஏ

ஆ) வைட்டமின்பி

இ) வைட்டமின்சி

ஈ) வைட்டமின்டி

15. வைட்டமின்'சி' சத்துநிறைந்தஉணவுகள்

அ) பெர்ரி,சிட்ரஸ்பழம், கிவி,தக்காளி

ஆ) ஆப்பிள்,வாழை,கேரட்

இ) சிட்ரஸ், வாழை

ஈ) சப்போட்டா,மாங்காய், திராட்சை

16.சிறுநீர்ப்பாதைத்தொற்றுதடுக்கநலமானபழக்கம்

அ) அடிக்கடிசிறுநீர்கழித்தல்

ஆ) காரமானஉணவுகளைஉட்கொள்ளுதல்

இ) நிச்சலுக்குபிறகுதூணீமாற்றாமல்இருத்தல்

ஈ) சிறீதுநீர்மட்டும்குடித்தல்

17. சிறுநீர்ப்பாதைத்தொற்றிலிருந்துசிலநிவாரணம்

அ) சூடானசானிடரிநாப்கின்பயன்படுத்துதல்

ஆ) தண்ணீர்நிறையகுடித்தல்

இ) அமற்றும்ஆ

ஈ) கோலாஸ்குடித்தல்

18.சிறுநீர்ப்பாதைத்தொற்றுதடுப்பதற்கானஒருமுறை

அ) குமிழிகுழியல்

ஆ) வாசனை ,பெண்பால்குறித்ததயாரிப்புகளைபயன்படுத்துதல்

இ) மழைக்குழியல்

ஈ) சுகாதாரநாப்கிங்களைஅடிக்கடிபயமன்படுத்தாமல்இருத்தல்

19.எப்போதுமருத்துவரைஅழைப்பீர்கள்

அ) சிறுநீர்போகாமல்இருக்கும்போது

ஆ)சிறுநீரில்இரத்தம்வரும்போதும்

இ) வயிறுவீக்கம் (ம) சிறுநீர்போககஷ்டமாகஇருக்கும்போதும்

ஈ)அனைத்தும்

20. சிறுநீர்ப்பாதைத்தொற்றிற்குசிகிச்சைஅளிக்கமால்போனால்வரும்பாதிப்புக்கள்

அ)பக்கவாதம்

ஆ)இதயசெயலிழப்பு

இ)சிறுநீரகம்பாதிப்பு

ஈ)நீரிழிவுநோய்

பிரிவு-ஆ:சிறுநீர்ப்பாதைத்தொற்றுபற்றியநடைமுறைவினாக்கள்

வ. எண்	சிறுநீர்ப்பாதைத் தொற்று பற்றிய நடைமுறை வினாக்கள்	ஆம் ✓	இல்லை ×
1	நீங்கள்ஒருநாளைக்கு 3 முதல் 4 லிட்டர்தண்ணீர்அருந்துவீர்களா?		
2	நீங்கள்ஒருநாளைக்கு 6 முதல் 10 முறைசிறுநீர்கழிப்பீர்களா?		
3	நீங்கள்சிறுநீர்க்கழித்தப்பின்பும், மலம்கழித்தப்பின்பும்கைகழுவுவீர்களா?		
4	நீங்கள் பருத்தியிலான உள்ளாடைகளை அணிவிர்களா?		
5	நீங்கள் தினமும் உள்ளாடைகளை சுத்தப்படுத்துவீர்களா?		
6	நீங்கள் கழிவறையை பயன்படுத்திய முன்னரும், பின்னரும் சுத்தப்படுத்துவீர்களா? (பொது & சொந்தகழிப்பறை)		
7	நீங்கள் உங்கள் பிறப்புறப்பை முன்புறம் முதல் பின்புறமாக கழுவுவீர்களா?		
8	நீங்கள்உங்கள் பிறப்புறப்பை கழுவிய பின்னர் சுத்தமாக துடைப்பீர்களா?		
9	நீங்கள் 4 மணிநேரத்திற்கு ஒரு முறை சுகாதார நாப்கின்களை மாற்றுவீர்களா?		
10	உங்களுக்கு பிறப்புறுப்புப் பகுதியில் வாசனைத் திரவியங்களையோ, பவுடரயோ, சோப்பயோ, வாசனை கழிவறை காகிதத்தையோ உபயோகப்படுத்தும் பழக்கம் இல்லையா?		

விடைகள்

பகுதி-2

பிரிவு-அ

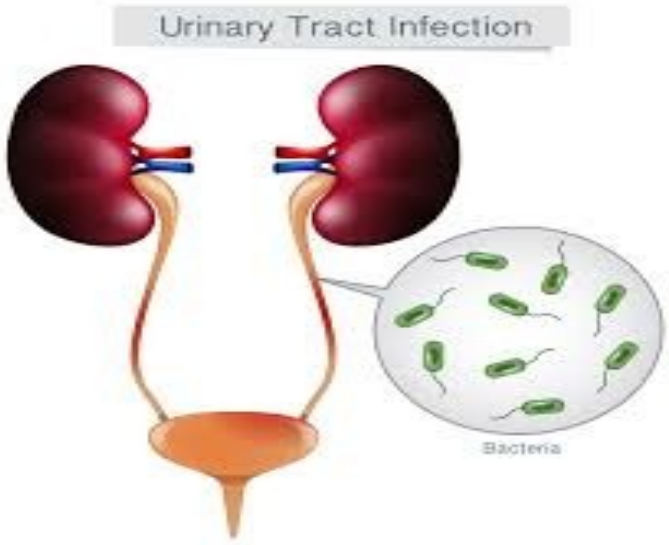
வினாக்கள்	விடைகள்
1	அ
2	அ
3	ஆ
4	ஆ
5	ஆ
6	ஆ
7	ஆ
8	அ
9	அ
10	ஈ
11	இ
12	அ
13	ஆ
14	ஈ
15	அ
16	ஈ
17	ஆ
18	அ
19	இ
20	இ

COMMUNITY HEALTH NURSE INITIATED PACKAGES ON

PREVENTION OF URINARY TRACT INFECTION

LESSON PLAN

CONTENT OF TEACHING OUTLINE



Name of The Student : Mrs. P. Vanmathi

Subject : Community Health Nursing

Topic : Prevention of Urinary Tract Infection

Group : School Going Adolescent Girls

Place : Selected Government School, Chennai

Duration : 45 Minutes

Method Of Teaching : Lecture Cum Discussion

CENTRAL OBJECTIVES:

At the end of the teaching program the adolescent girls will be able to acquire knowledge on prevention of urinary tract infection and develop desirable skill in practicing the prevention of urinary tract infection during the life time.

SPECIFIC OBJECTIVES:

At the end of the teaching program the adolescent girls will be able to

- review the anatomy and physiology of urinary system
- define the term of urinary tract infection
- state the epidemiology of urinary tract infection
- list down the causes of urinary tract infection
- enlist the risk factors of urinary tract infection
- explain about signs and symptoms of urinary tract infection
- enumerate the diagnostic evaluation of urinary tract infection
- elaborate the preventive measures of urinary tract infection
- describe the complication /effects of urinary tract infection

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
1	3minutes	Review the anatomy and physiology of urinary system	**ANATOMY AND PHYSIOLOGY OF URINARY SYSTEM:** The urinary system also known as the renal system or urinary tract, consists of • the kidneys-2 • ureters-2 • bladder-2 • urethra-1 ❖ The size and position of lower urinary tract structure vary with male and female anatomy ❖ The kidney is the organ that is responsible for the formation of urine and maintenance of urine output. ❖ Urine is formed is the kidneys through a filtration of blood.The urine is then passed through the ureters to the bladder, where it is stored.During urination, the urine is passed from the bladder through ureter to the outside of body.	Black board	Explaining and listening	Explain the structure and function of urinary system?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			Volume: 800-2000 ml of urine are normally produced everybody in a healthy human.This amount varies according fluid intake and kidney function.Average urine production in adult humans is about 1-2 litres per day, depending on state of hydration, activity level, environmental factors, weight, and the individual's health **The main functions of the urinary system and its components are to** • Regulate blood volume and composition(e.gsodium,pottasium,and calcium) • Regulate blood pressure • Regulate PH homeostasis of the blood.			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
2	2 minutes	Define the term urinary tract infection	• Contributes to the production of red blood cells by the kidney • Helps synthesizes calcitrol the(active form of vitD) • Stores waste product (mainly urea and uric acid) before it and other products are removed from the body. **DEFINITION OT URINARY TRACT INFECTION:** A urinary tract infection is an presence of micro organism within the urinary tract.it is an infection that affects part of the urinary tract.When it affect the lower urinary tract it is known as a bladder infection (cystitis) and when I affects the upper urinary tract it is known as a kidney infection(pyelonephritis).	Roller board	Explaining and listening	Define the term urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
3	2 minutes	State the epidemiology of urinary tract infection	**EPIDEMIIOLOGY OT URINARY TRACT INFECTION:** Urinary tract infections are the most frequency bacterial infection in women. Acute uncomplicated urinary trcat infection is more prevalent among adolescents girls and is the fourth main reason for OPD visit among this group. In India , the national family health survey reported the prevalence of urinary tract infection among adolescent girls(10-19) years as 16.6% and the risk of bacteremia developing in adolescent girls as5-10%.	Black board	Explaining and listening	State the prevalence rate of urinary tract infection among adolescents ?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
4	3 minutes	Listdown the causes of urinary tract infection	**CAUSES OF URINARY TRACT INFECTION:** UropathogenicE.coli from the gut is the cause of 80-85%of community –acquired urinary tract infections, with staphylococcus saprophyticus bring the cause in 5-10% . Rarely they may be due to viral or fungal infections.Healthcare- associated urinary tract infections(mostly related to urinary catheterization) involve a much broader range of pathogens including: • E.coli(27%) • Klebsiella(11%) • Pseudomonas(11%) • The fungal pathogens candida albicans(9%) • Enterococcus(7%)among others`	Chart	Explaining and listening	What is the causes of urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
5	5 minutes	Enlist the common risk factors of adolescents urinary tract infection	**RISK FACTORS OF ADOLESCENT URINARY TRACT INFECTION:** • poor hygiene • dysfunctional voiding pattern • use of synthetic underwear • and panty hose • tight jeans • wet bathing suits • allergens/ irritants • famine hygiene sprays • bubble baths • performed toilet paper • Use sanitary napkins for long time during periods and soaps may the development of cystitis.	Chart	Explaining and listening	Listdown the riskfactors of urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
6	5 minutes	Explain the signs and symptoms of urinary tract infection	**SIGNS AND SYMPTOMS OF URINARY TRACT INFECTION**: **<u>The infection in the urinary tract will produce the signs like</u>** ♣ frequency urgency to urinate, ♣ a burning or itching sensation while urinating, ♣ feeling that the bladder is full,even after urinating, ♣ cloudy urine, ♣ bloods in urine, ♣ foul smelling urine , ♣ pain in the lower back abdomen, ♣ malaise or a feeling of being generally unwell. **<u>The infection of urinary tract will produce the symptoms like</u>** ♣ suprapubic pain , ♣ nausea with or without vomiting, ♣ extreme fatigue,	Hand out	Explaining and listening	What are all the signs and symptoms occur due to urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			♣ reduced urinary volume or no urine, ♣ trouble breathing or rapid breathing , ♣ confusion or brain fog, ♣ unusual anxiety level, ♣ changes heart rate, such as palpitations or a rapid heartbeat, ♣ weak pulse ♣ high fever or low body temperature			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
7	5 minutes	Enumerate the diagnostic evaluation of urinary tract infection	**DIAGNOSTIC EVALUATION OF URINARY TRACT INFECTION:** In straight forward cases, a diagnosis may be made and treatment given based on symptoms alone without further laboratory confirmation. In complicated or questionable cases , it may be useful to confirm the diagnosis via, ➢ **Urine analysis,**looking for the presence of urinary nitrates , white blood cells(leukocytes), or leukocyte easterase. ➢ **Urine microscopy**, looking for the presence of red blood cells , white blood cells , or bacteria. ➢ **Urine culture** is deemed positive if it shows a bacterial colony count of greater than or equal to 10^3 colony forming units per ML of a typical urinary tract organism.	Handout	Explaining and listening	How to diagnose the urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			➢ **Antibiotic sensitivity** can also be tested with their cultures , making them useful in the selection of antibiotic treatment ➢ **Chest X-RAY** ,look to theinfection cause the lungs ➢ **CT (computerized tomography)** scan of the abdomen and kidney can help form a complete picture of the kidney.			
8	5 minutes	Describe the treatment of urinary tract infection	**TREATMENT OF URINARY TRACT INFECTION**: The mainstay treatment is antibiotics.phenazopyridine is occasionally prescribed during the first few days in addition to antibiotic s to help with the burning and urgency sometimes felt during a bladder infection.Acetaminophen (paracetamol) may be used for fevers.If uncomplicated infection can be diagnosed and	Handout	Explaining and listening	How to treat the urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			treated based on symptoms alone.Antibiotics taken by mouth such trimethaprim/sulfamethazole(TMP/SMX),nitrofurantoin, or fosfomycin are the typically first line drugs Cephalosporins, amoxicillin/calvulanic acid, or a flouroquinolone may be also used			
9	10 minutes	Elaborate the preventive measures of urinary tract infection	**PREVENTIVE MEASURES OF URINARY TRACT INFECTION:** <u>HYDRATION/DIET:</u> ✓ Drink plenty of liquids especially water (6-8 litres per day) ✓ Drink VITAMIN C rich intake like (cranberry juice,blueberry,kiwi,tomatoes, red peppers,orange,grapefruits)to increase the acidity in urine and kill the bacteria. ✓ Home made preparation of urinary tract infection-D	Computer with LCD projector	Explaining and listening	How to prevent the urinary tract infection?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			mannose,bearberryleaf,cranberryextract,garlic extract are natural supplements to prevent urinary tract infection. <u>PERSONAL HYGIENE:</u> ✓ Wipe or wash the genital area front to back ✓ Wear the cotton underpants ✓ After swimming , change into dry clothes instead of sitting around wetsuits . ✓ The perineal area to be dried after wahing by using cotton cloth. ✓ Urinate frequently 8-9 times per day,2 times per night.averaing>3700 ml per day .This flusher bacteria out of the bladder,reduces the chances of cystitis in those prone to urinary tract infection .not hold the urine too long. ✓ Change the tampons/feminine sanitary pads every 6 hours once,while some women might have heavy flow and would need toChange more often			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			others.usually on days when you have a lesser flow ,but you must change at regular interval. ✓ Probiotics could help prevent urinary tract infection. <u>THINGS TO BE AVOIDED:</u> ✓ Avoids very tight jeans/ pantyhose other pants and keep the area around urethra dry. ✓ Avoids bubble baths, perfumed soaps, other substances that can irritate the genitals/urethra.best one shower bath. ✓ Avoids foods/beverages that can causes bladder irritation.common offenders includes colas,and other caffeinated drinks,chocolates ✓ citrus juices and other some spices.also avoid smoking during this time.			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			✓ Don't douche(water thineger ,fragrance+antiseptics) ✓ Don't use feminine deodorants(smell,scent) <u>CONSULT THE DOCTOR:</u> ✓ Incaseof complaints of cannot pass urine, passing blood urine, swelling in abdomen and difficulty urinating means you must call the doctor. **COMPLICATION/EFFECTS OF URINARY TRACT INFECTION:** If untreated it leads to worsen may produce ▪ collections of pus near the kidneys , ▪ organ failure, ▪ kidney damage, ▪ scar tissue in the urinary tract, ▪ septic shock ▪ infertility, ▪ cervix cancer etc			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
10	5 minutes	Monitor the complication /effects of urinary tract infection		Flannel board with flannel graph	Explaining and listening	What are all the complication of urinary tract infection?

SUMMARY:

So far we have discussed about urinary tract infection, Anatomy and Physiology of urinary system, epidemiology, causes, risk factors, signs and symptoms, diagnostic evaluation and preventive measures and complication/effects of urinary tract infection on adolescent girls.

CONCLUSION:

I Hope you have gained some knowledge regarding urinary tract infection and you will able to apply it is practical life.

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
1	3 நிமிடங்கள்	சிறுநீரக மண்டலத்தின் அமைப்பு மற்றும் செயல்படும்விதத்தை விளக்குக	<u>சிறுநீரக மண்டலத்தின் அமைப்பு மற்றும் செயல்படும் விதம்</u> • சிறுநீரகப்பாதைஎன்பது 2 சிறுநீரகத்தையும் 2 சிறுநீர்வடிக்குழாயையும் 1 சிறுநீர்ப்பையையும் 1 சிறுநீர்க்குழாய்திறப்பையும் கொண்டது. ♠ கீழ் சிறுநீரகப்பாதையின் அமைப்பு ஆண், பெண் இருவருக்கும் வேறுப்படும். ♠ சிறுநீரகம் என்ற உறுப்பு சிறுநீர் உருவாவதற்கு உதவுகிறது.	விளக்குதல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கரும்பலகை	சிறுநீரக மண்டலத்தின் அமைப்பு மற்றும் செயல்படும் விதத்தை கூறுக?

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
			♠ சிறுநீரகத்தில் உருவாகும் சிறுநீர் சிறுநீர் வடிகுழாய் வழியாக சிறுநீர்ப்பையில் சேகரிக்கப்பட்டு,சிறுநீர் கழிக்கும்போது சிறுநீர்குழாய்த் திறப்பின் வழியாக வெளியேற்றப்படுகிறது. **<u>சிறுநீரின்அளவு:</u>** ♦ ஆரோக்கியமான மனிதனால் 800-2000மி.லி சிறுநீர் உற்பத்தி செய்யப்படுகிறது. இந்த அளவு திரவம் உட்கொள்ளுதல், செயல்பாட்டுநிலை, சுற்றுசூழல்காரணி, எடை, தனிநபரின் ஆரோக்கியம் மற்றும் சிறுநீரகத்தின் செயல்பாட்டினை பொறுத்து மாறுப்படும்.				

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
			<u>சிறுநீரகம் செய்யும் வேலைகள்</u>: 1. இரத்தஅளவு மற்றும் இரத்தக்கலவையைக் கட்டுப்படுத்துதல் (சோடியம், பொட்டாசியம், கால்சியம்) 2. இரத்த அழுத்தத்தை ஒழுங்குப்படுத்துகிறது. 3. இரத்தத்தின் PH அளவை ஒழுங்குப்படுத்துகிறது. 4. இரத்த சிவப்பணுக்கள் உருவாவதற்கு சிறுநீரகம் உதவுகிறது 5. வைட்டமீன் "டி" செயல்வடிவமான கால்சிட்ரால் உருவாக உதவுகிறது. 6.யுரியா, யுரிக் அமிலம் போன்ற சிறுநீர் கழிவுப் பொருட்களை வெளியேற்ற உதவுகிறது. .				

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
2 3	2 நிமிடங்கள் 2 நிமிடங்கள்	.சிறுநீர்ப்பாதை தொற்று-வரையறுத்தல் சிறுநீர்ப்பாதை தொற்று நோய்தாக்க வீதத்தை அறிதல்	.**<u>சிறுநீர்ப்பாதை தொற்று-வரையறை:</u>** சிறுநீர்ப்பாதை தொற்று என்பது சிறுநீர்ப்பாதையில் நோய்க்கீருமிகள் இருத்தலாகும். **<u>சிறுநீர்ப்பாதை தொற்றுநோய் தாக்கவீதம்:</u>** பெண்களுக்கு வரும் பாக்டீரியா நோய்த்தொற்றுகளில் அடிக்கடி வருவது சிறுநீர்ப்பாதை தொற்றுதான். அதிலும் கடுமையான சிக்கலற்ற சிறுநீர்ப்பாதை தொற்று இளம்பருவ பெண்களுக்கே அதிகமாக வருகிறது	விளக்குதல் மற்றும் கலந்து உரையாடல் விளக்குதல் மற்றும் கலந்து உரையாடல்	கவனித்தல் மற்றும் கலந்து உரையாடல் கவனித்தல் மற்றும் கலந்து உரையாடல்	கரும்பலகை கரும்பலகை	சிறுநீர்ப்பாதை தொற்று என்றால் என்ன? .சிறுநீர்ப்பாதை தொற்று அதிகமாக யாருக்குவர வாய்ப்புள்ளது?

வ.எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
4	3 நிமிடங்கள்	சிறுநீர்ப்பாதைதொற்றுக்கான காரணங்களை வரிசைப்படுத்துக	**<u>சிறுநீர்ப்பாதை தொற்றுக்கான காரணங்கள்:</u>** 80-85%-எ.கோலை 5-10%-மற்றவை (ஸ்டெஃபெலொக்காக்கஸ், செஃப்ரோபைடிக்கஸ்)	விளக்குதல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கையடக்க பதிவேடு	
5	5 நிமிடங்கள்	இளம்வயது பெண்களின் சிறுநீர்ப்பாதைதொற்றுக்கான ஆபத்துகாரணிகளை வரிசைப்படுத்துக	**<u>இளம் வயது பெண்களின் சிறுநீர்ப்பாதை தொற்றுக்கான ஆபத்து காரணிகள்:</u>** 1. மோசமானசுகாதாரம் 2. செயலற்ற சிறுநீர் கழிக்கும் முறை 3. செயற்கை உள்ளாடை பயன்பாடு 4. இறுக்கமான ஜீன்ஸ் பயன்படுத்துதல் 5. வாசனை மற்றும் பெண்பால் குறித்த தயாரிப்புகளை பயன்படுத்துதல் 6. குமிழிக்குளியல் 7. கழிவறை காகிதம் பயன்படுத்துதல்	விளக்குதல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கையடக்க பதிவேடு	

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
6	5 நிமிடங்கள்	சிறுநீர்ப் பாதை தொற்றுக்கான அறிகுறிகளை விளக்குக	8. மாதவிடாயின் போது நாப்கின்களை அடிக்கடி மாற்றாமல் இருப்பது **<u>சிறுநீர்ப் பாதை தொற்றுக்கான அறிகுறிகள்:</u>** ◈ அடி வயிற்று வலி ◈ அடிக்கடி சிறுநீர் கழித்தல் ◈ சிறுநீர் கழிக்கும் போது எரிச்சல் மற்றும் அரிப்பு உணர்வு ◈ சிறுநீர் கழித்த பின்பும், சிறுநீர்பை நிரம்பியுள்ளது போன்ற உணர்வு ◈ கலங்கலான சிறுநீர் ◈ சிறுநீர் இரத்தம் வடிதல் ◈ துர்நாற்றம் வீசும் சிறுநீர் ◈ உடல் நலக்குறைவு ◈ பொதுவாக உடல்நிலை சரியில்லாதது போன்ற உணர்வு ◈ வாந்தியுணர்வு ◈ தீவிரசோர்வு	அறிவுறுத்தல் மற்றும் கலந்து உரையாடல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கையடக்க பதிவேடு	**ஏதேனும் ஐந்து . சிறுநீர்ப் பாதை தொற்றுக்கான அறிகுறிகளை கூறுக?**

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
7	5 நிமிடங்கள்	சிறுநீர்ப் பாதை தொற்றினை பரிசோதிக்கும்வழிமுறைகளைஅறிதல்	◈ குறைக்கப்பட்ட சிறுநீர் அளவு (அ) சிறுநீர் இல்லை. ◈ சுவாசித்தலில் சிக்கல் ◈ அசாதாரண கவலைநிலை ◈ குழப்பம் ◈ படப்படப்பான இதயத்துடிப்பு ◈ பலவீனமான நாடித்துடிப்பு ◈ அதிகமான காய்ச்சல் (அ) குறைவான உடல்வெப்பநிலை **<u>சிறுநீர்ப்பாதை தொற்றினை பரிசோதிக்கும் வழிமுறைகள்</u>:** • சிறுநீர்ப் பகுப்பாய்வு • சிறுநீர் நுண்ணோக்கி • சிறுநீர் நுண்கிருமி ஆய்வு • ஆண்டிபயோடிக் உணர்திறன் • மார்பு X-நுண்கதிர் • சிடிஸ்கேன்	அறிவுறுத்தல் மற்றும் கலந்து உரையாடல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கையடக்க பதிவேடு	எப்படி சிறுநீர்ப்பாதை தொற்றினை பரிசோதிப்பாய்?

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
8	15 நிமிடங்கள்	சிறுநீர்ப் பாதை தொற்று வராமல் தடுப்பதற்கானவழி முறைகளை விளக்குதல்	**<u>சிறுநீர்ப்பாதை தொற்றுவராமல் தடுப்பதற்கான வழிமுறைகள்:</u>** **<u>1.நீரேற்றம்/உணவு முறைகள்:</u>** • தினமும் 6-8 லிட்டர் தண்ணீர் (அ) நீர் ஆகாரங்கள் அருந்த வேண்டும். • வைட்டமீன் "சி" நிறைந்த (கிரான்பெரி, கிவி, தக்காளி, ஆரஞ்சு,திராட்சை போன்ற பழச்சாறு மற்றும் மிளகு) போன்றவற்றை உட்கொள்ள வேண்டும். • வைட்டமீன் "சி" நிறைந்த உணவுபொருட்கள் சிறுநீரில் அமிலத்தின் அளவை அதிகரித்து பாக்டீரியாவை கொல்லும்.	அறிவுறுத்தல் மற்றும் கலந்து உரையாடல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	விளம்பர அட்டை	ஏதேனும் நான்கு சிறுநீர்ப்பாதை தொற்று வராமல் தடுப்பதற்கான வழி முறைகளை கூறுக

வ.எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
			2.சுகாதார நடைமுறைகள்: • இனப்பெருக்க உறுப்பை முன்புறம் முதல் பின் புறமாக கழுவ வேண்டும். • மேலும் எப்பொழுதும் உலர்வாக வைத்து கொள்ள வேண்டும். • பருத்திதுணியினால் ஆன உள்ளாடைகளை அணிய வேண்டும். • தண்ணீரில் நனைந்த பிறகு உலர்ந்த ஆடைகளை பயன்படுத்த வேண்டும். • 8-9 முறை பகலிலும், 2 முறையாவது இரவிலும் சிறுநீர் கழிக்க வேண்டும். • மாதவிடாயின் போது நாப்கின்களை அடிக்கடி (4மணி நேரத்திற்க்கு ஒரு முறை) மாற்றவேண்டும். சில பெண்களுக்கு அதிக இரத்தப்போக்கு				

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
			ஏற்பட்டால், அதற்கேற்றவாறு அடிக்கடி பயன்படுத்த வேண்டும். குறைவாக இருந்தாலும் சரியான இடைவெளியில் மாற்ற வேண்டும். **3.தவிர்க்கவேண்டியவை:** • செயற்கை உள்ளாடை பயன்படுத்த கூடாது • இறுக்கமான ஜீன்ஸ் பயன்படுத்த கூடாது • வாசனை மற்றும் பெண்பால் குறித்த தயாரிப்புகளை பயன்படுத்தகூடாது • குமிழிக்குளியல் குளிக்கக் கூடாது. மழைகுழியல் சிறந்தது.				

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
			• கழிவறை காகிதம் பயன்படுத்த கூடாது • சிறுநீர்ப்பையை எரிச்சலூட்டும் வகையான உணவு மற்றும் குளிர்பானங்களை (கோலாஸ், டீ, காப்பி, சாக்லேட்) பயன்படுத்த கூடாது • சிட்ரஸ் அமிலம் நிறைந்த பழச்சாறுகள் மற்றும் காரமான உணவுகளை தவிர்க்கவும். • புகைப்பிடித்தலை தவிர்த்தல். **4.மருத்துவ ஆலோசனை:** • சிறுநீர்கழிக்க முடியாமலோ, சிறுநீரில் இரத்தம் வந்தாலோ, வயிறுவீக்கம் மற்றும் சிறுநீர் கழிக்க கஷ்டமாக இருந்தாலோ மருத்துவரை அணுக வேண்டும்.				

வ. எண்	நேரம்	நோக்கம்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	மதிப்பீடு
9	5 நிமி	சிறுநீர்ப் பாதை தொற்றால் ஏற்படும் விளைவுகள் அறிதல்	**<u>சிறுநீர்ப் பாதை தொற்றால் ஏற்படும் விளைவுகள்:</u>** • ஒரு வேளை நீங்கள் இந்த சிறுநீர்ப்பாதை தொற்றிற்கான சிகிச்சை பெறாவிட்டால் கீழ்க்கண்ட மோசமான நிலைக்கு கொண்டு செல்லும். • சிறுநீரகத்திற்கு அருகில் சீல் இருத்தல் • உறுப்பு செயலிழப்பு • சிறுநீரக பாதிப்பு • சிறுநீரகப் பாதையில் வடுதிசு உருவாதல் • கருவுறாத்தன்மை • கர்ப்பப்பை வாய் புற்றுநோய்	விளக்குதல்	கவனித்தல் மற்றும் கலந்து உரையாடல்	கையடக்க பதிவேடு	சிறுநீர்ப்பாதை தொற்றால் என்ன மாதிரியான விளைவுகள் ஏற்படும்?

முன்னுரை:

அனைவருக்கும் வணக்கம். நான் திருமதி.பெ.வான்மதி, சென்னை மருத்துவக் கல்லூரியில் செவிலியப் பட்டப்படிப்பு இரண்டாம் ஆண்டு படித்து வருகிறேன். நான் பள்ளி மாணவர்களுக்கு சிறுநீர்ப்பாதை தொற்று வராமல், தடுப்பதற்கான வழிமுறைகளை பற்றி கலந்துரையாடப் போகிறேன்.

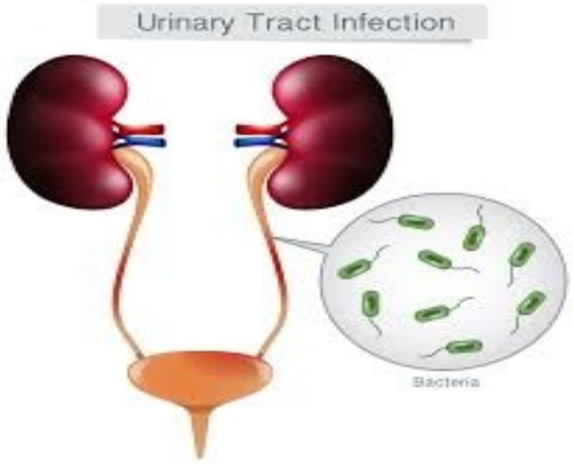
நோக்கம்:

- சிறுநீரக மண்டலத்தின் அமைப்பு மற்றும் செயல்படும் விதத்தை விளக்குதல்
- சிறுநீர்ப்பாதை தொற்று-வரையறைத்தல்
- சிறுநீர்ப்பாதை தொற்று நோய் தாக்க வீதத்தை அறிதல்
- சிறுநீர்ப்பாதை தொற்றுக்கான காரணங்கள் வரிசைப்படுத்துதல்
- இளம் வயது பெண்களின் சிறுநீர்ப்பாதை தொற்றுக்கான ஆபத்து காரணிகளை வரிசைப்படுத்துதல்
- சிறுநீர்ப்பாதை தொற்றுக்கான அறிகுறிகளை விளக்குதல்
- சிறுநீர்ப்பாதை தொற்றினை பரிசோதிக்கும் வழிமுறைகளை அறிதல்
- சிறுநீர்ப்பாதை தொற்றுவராமல் தடுப்பதற்கான வழிமுறைகளை விளக்குதல்
- சிறுநீர்ப்பாதை தொற்றால் ஏற்படும் விளைவுகளை அறிதல்

இளம்பருவச் சிறுமிகளிடையே சிறுநீர்பாதை நோய் தொற்றை தடுப்பது குறித்த சமூக சுகாதார செவிலியரின்

பாட திட்டம்

கற்பித்தலின் உள்ளடக்கம்



மாணவியின் பெயர்	:	பெ.வான்மதி
பாடம்	:	சமூக சுகாதாரசெவிலியம்
தலைப்பு	:	**சிறுநீர்பாதைநோய்தொற்றைதடுப்பு**
குழு	:	**இளம்பருவச்பள்ளிசிறுமிகள்**
இடம்	:	தேர்ந்தெடுக்கப்பட்ட அரசுபள்ளி
நேரம்	:	நிமிடங்கள் 45
கற்பிக்கும் முறை	:	விரிவுரையாடல் விவாதம

சுருக்கம்:

இதுவரை நாம் நமது உடலின் சிறுநீர் பாதை அமைப்பு மற்றும் செயல்படும் விதம் , சிறுநீர்பாதைநோய்தொற்றுதாக்க வீதம்,காரணம்,அறிகுறி, கண்டறியும் முறை, தடுக்கும் முறை, பின் விளைவுகள் பற்றி தெரிந்துக் கொண்டோம்.

முடிவுரை:

நீங்கள் அனைவரும் சிறுநீர்பாதை நோய் தொற்றை தடுப்பு பற்றி நன்கு தெரிந்து மற்றும் அதனை நடைமுறை வாழ்வில் பின் பற்றுவீர்கள் என்று நம்புகிறேன்.

இளம் பருவ பள்ளி சிறுமிகளிடையே சிறுநீர் பாதை நோய்த் தொற்று தடுப்பதற்கான சமூக சுகாதார செவிலியரின் ஊக்குவித்தலின் தொகுப்பிற்கான ஆய்வு

சிறுநீர்ப் பாதை தொற்று-வரையறை:

"சிறுநீர்ப் பாதை தொற்று என்பது சிறுநீர்ப் பாதையில் நோய்க்கீருமிகள் இருத்தலாகும்."

சிறுநீர்ப் பாதை தொற்றுக்கான காரணங்கள்:

- **80-85%-எ.கோலை**
- **5-10% -மற்றவை (ஸ்டெ.ஃபெலொக்காக்கஸ், செ.ஃப்ரோபைடிக்கஸ்)**

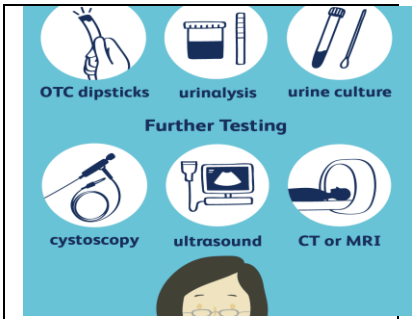
இளம் வயது பெண்களின் சிறுநீர்ப் பாதை தொற்றுக்கான ஆபத்து காரணிகள்:

1. மோசமான சுகாதாரம்
2. செயலற்ற சிறுநீர் கழிக்கும் முறை
3. செயற்கை உள்ளாடை பயன்பாடு
4. இறுக்கமான ஜீன்ஸ் பயன்படுத்துதல்
5. வாசனை மற்றும் பெண்பால் குறித்த தயாரிப்புகளை பயன்படுத்துதல்
6. குமிழிக் குளியல்
7. கழிவறை காகிதம் பயன்படுத்துதல்
8. மாதவிடாயின் போது நாப்கின்களை அடிக்கடி மாற்றாமல் இருப்பது

சிறுநீர்ப்பாதை தொற்றுக்கான அறிகுறிகள்:

- அடி வயிற்று வலி
- அடிக்கடி சிறுநீர் கழித்தல்
- சிறுநீர் கழிக்கும் போது எரிச்சல் மற்றும் அரிப்பு உணர்வு
- சிறுநீர்ப் கழித்த பின்பும், சிறுநீர்பை நிரம்பியுள்ளது போன்ற உணர்வு
- கலங்கலானசிறுநீர்
- சிறுநீர் இரத்தம் வடிதல்
- துர்நாற்றம் வீசும்சிறுநீர்
- உடல் நலக்குறைவு
- பொதுவாக உடல்நிலை சரியில்லாதது போன்ற உணர்வு
- வாந்தியுணர்வு
- தீவிரசோர்வு
- குறைக்கப்பட்ட சிறுநீர்அளவு (அ) சிறுநீர்இல்லை.
- சுவாசித்தலில் சிக்கல்
- அசாதாரண கவலைநிலை
- குழப்பம்
- படப்படப்பான இதயத்துடிப்பு
- பலவீனமான நாடித்துடிப்பு
- அதிகமான காய்ச்சல் (அ) குறைவான உடல் வெப்பநிலை

சிறுநீர்ப் பாதை தொற்றினை பரிசோதிக்கும் வழிமுறைகள்:



- ♥ சிறுநீர்ப் பகுப்பாய்வு
- ♥ சிறுநீர் நுண்ணோக்கி
- ♥ சிறுநீர் நுண்கிருமி ஆய்வு
- ♥ ஆண்டிபயோடிக் உணர்திறன்
- ♥ மார்பு **X**-நுண்கதிர்

சிறுநீர்ப்பாதை தொற்று வராமல் தடுப்பதற்கான வழி முறைகள்:

1.நீரேற்றம்/உணவுமுறைகள்:

- தினமும் 6-8 லிட்டர்தண்ணீர் (அ) நீர் ஆகாரங்கள் அருந்த வேண்டும்.
- வைட்டமீன் "சி" நிறைந்த (கிரான்பெரி,கிவி,தக்காளி,ஆரஞ்சு,திராட்சை போன்ற பழச்சாறு மற்றும் மிளகு) போன்றவற்றைஉட்கொள்ளவேண்டும்.
- வைட்டமீன் "சி" நிறைந்த உணவுபொருட்கள் சிறுநீரில் அமிலத்தின் அளவை அதிகரித்து பாக்டீரியாவை கொல்லும்.

2.சுகாதாரநடைமுறைகள்:

- இனப்பெருக்க உறுப்பை முன்புறம் முதல் பின்புறமாக கழுவவேண்டும்.மேலும் எப்பொழுதும் உலர்வாக வைத்து கொள்ள வேண்டும்.
- பருத்தி துணியினால் ஆன உள்ளாடைகளை அணியவேண்டும்.
- தண்ணீரில் நனைந்த பிறகு உலர்ந்த ஆடைகளை பயன்படுத்த வேண்டும்.
- 8-9 முறை பகலிலும், 2 முறையாவது இரவிலும் சிறுநீர் கழிக்க வேண்டும்.
- மாதவிடாயின் போது நாப்கின்களை அடிக்கடி (4மணிநேரத்திற்க்குஒருமுறை) மாற்றவேண்டும்.சில பெண்களுக்கு அதிக இரத்தப்போக்கு ஏற்பட்டால், அதற்கேற்றவாறு அடிக்கடி பயன்படுத்த வேண்டும்.குறைவாக இருந்தாலும் சரியான இடைவெளியில் மாற்றவேண்டும்.

3.தவிர்க்கவேண்டியவை:

- செயற்கை உள்ளாடை பயன்படுத்தகூடாது
- இறுக்கமான ஜீன்ஸ் பயன்படுத்தகூடாது
- வாசனை மற்றும் பெண்பால் குறித்த தயாரிப்புகளை பயன்படுத்தகூடாது
- குமிழிக்குளியல் குளிக்கக்கூடாது மழைகுழியல்சிறந்தது. கழிவறை காகிதம் பயன்படுத்தகூடாது
- சிறுநீர்ப்பையை எரிச்சலூட்டும் வகையான உணவு மற்றும் குளிர்பானங்களை (கோலாஸ், டீ, காப்பி, சாக்லேட்) பயன்படுத்தகூடாது
- சிட்ரஸ் அமிலம் நிறைந்த பழச்சாறுகள் மற்றும் காரமான உணவுகளை தவிர்க்கவும்.
- புகைப்பிடித்தலைதவிர்த்தல்.

4.மருத்துவஆலோசனை:

- சிறுநீர்கழிக்க முடியாமலோ, சிறுநீரில்இரத்தம் வந்தாலோ, வயிறுவீக்கம் மற்றும் சிறுநீர்கழிக்க கஷ்டமாக இருந்தாலோ மருத்துவரை அணுக வேண்டும்.

சிறுநீர்ப் பாதை தொற்றால் ஏற்படும் விளைவுகள்:

- ஒரு வேளை நீங்கள் இந்த சிறுநீர்ப் பாதை தொற்றிற்கான சிகிச்சை பெறாவிட்டால் கீழ்க்கண்ட மோசமான நிலைக்கு கொண்டு செல்லும்.
- சிறுநீரகத்திற்கு அருகில் சீல் இருத்தல்
- உறுப்பு செயலிழப்பு
- சிறுநீரக பாதிப்பு
- சிறுநீரகப் பாதையில் வடு திசு உருவாதல்
- கருவுறாத்தன்மை
- கர்ப்பப்பை வாய் புற்றுநோய்

பெ.வான்மதி

முதுகலை செவிலிய படிப்பு இரண்டாம் ஆண்டு

INFORMATION OF PARTICIPANTS

TITLE: A STUDY TO ASSESS THE IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AT SELECTED GOVERNMENT SCHOOL, CHENNAI.

Investigator : P.Vanmathi

Name of the Participant :

Date :

Age/sex

You are invited to take part in this study. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to Cooperative in this study being conducted inChennai Girls Higher Secondary School, Rotlers street, Chennai.

What is the Purpose of the Research study? (explain briefly)

The main purposes of this study is to teach the adolescent girls on regarding prevention of urinary tract infection with the use of community health nurse initiated packages. To improve the knowledge and practices of the adolescent girls regarding prevention of urinary tract infection.

Obtained permission from the Institutional Ethics Committee.

The study design:

Quasi experimental study – Non randomized control group research design

Study Procedures

- The Study will be undertaken after the approval of Institutional Ethics committee.
- Those who are willing to participate will be enrolled and informed consent will be obtained.

- The adolescent girls who full fill the inclusion criteria and exclusion criteria are selected as samples
- The level of knowledge and practice regarding prevention of urinary tract infection is assessed with semi- structured questionnaire and pre-test to the adolescent girls.
- Teach the adolescent girls regarding prevention of urinary tract infection.
- After that assess the knowledge and practice regarding prevention of urinary tract infection with community health nurse initiated packages.
- After seven days analyze the impact of knowledge and practice regarding prevention of urinary tract infection by post-test.
- Result of the study will be analyzed by using descriptive and inferential statistics.

Possible Risk to you- Briefly Mention

No risk involved

Possible benefits to you

After finishing this study, investigator will provide adequate knowledge and practice about prevention of urinary tract infection. It will improve the knowledge and practice of the adolescent girls about the prevention of urinary tract infection.

Possible benefits to other people

The result of the research may provide benefits to the patients and to follow some of urinary tract infection preventive measures.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your personal details. The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

Your privacy in this research will be maintained throughout this study. In the event of any publication or presentation resulting from research, no personal information will be shared.

How will your decision not to participate in the study affect you?

Your decisions not to participate in this research study will not affect your routine medical check up, and your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during course of the study without giving any reasons.

However, it is advisable that you talk to the research team prior to stopping the education teaching / discontinuation of teachingetc

The result of this study will be informed to you at the end of the study.

Signature of Investigator

Date

Signature of Participants

Date

INFORMED CONSENT

Investigator :

Name of the participant :

Age /sex :

Name of the institution :College of Nursing, Madras Medical College, Chennai.

Title : "A study to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls, Selected Government school, Chennai.''

Documentation of the informed consent: (legal representative can sign if participant is minor or competent)

- I ----------have read /it have been read for me ,the information in this form. Was free to ask any questions and they have been answered .I am over 25 years of age and exercising my free power of choice, hereby give my consent to include my son/daughter as a participant in the study
- I have read and understood this consent form and the information provided to me
- I have had the consent document explained in detail to me
- I have been explained about the nature of my study
- My rights and responsibilities have been explained to me by the investigator
- I agree to cooperate with the investigator
- I have not participated in any research study at any time
- I am aware of the fact that I can opt out of the study at any time without having to give any reason
- I here by give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities ,government agencies and institutional ethics committee. I understand that they are publicly presented
- My identity will be kept confidential if my data are publicly presented
- I am aware that I have any question during this study ; I should contact the concerned investigator

Signature of Investigator Signature of Participants

Date: Date:

சுய ஒப்புதல் படிவம்

ஆராய்ச்சி தலைப்பு: தேர்ந்தெடுக்கப்பட்ட அரசு பள்ளி சென்னை இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பது குறித்த சமூக சுகாதார செவீலியரின் செயல்திறனை மதிப்பிடுவதற்க்கான ஒரு ஆய்வு

ஆய்வாளர் பெயர் : பெ.வான்மதி

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/ பால் :

- ஆய்வாளர்கள் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழு மனதுடன் சுய நினைவுடன் சம்மதிக்கிறேன்.
- ஆய்வாளர் மேற்கொள்ளப்போகும் பரிசோதனைகளை மிக தெளிவாக விளக்கிக்கூறினார்`
- எனக்கு விருப்பமில்லாத பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் மூலம் அறிந்து கொண்டேன்.
- இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு புரிந்து கொண்டேன்.எனது உரிமைகள் மற்றும் கடமைகள் ஆய்வாளர் மூலம் விளக்கப்பட்டது.
- நான் ஆய்வாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன்..எனக்கு ஏதேனும் உடல்நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளர் இடம் தெரிவிப்பேன்.
- நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம் பெறவில்லை என்பதை தெரிவித்துக்கொள்கிறேன்.
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன்.அப்படி வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆய்வாளர் கையொப்பம் பங்கேற்பாளர் கையொப்பம்

தேதி: தேதி:

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு: தேர்ந்தெடுக்கப்பட்ட அரசு பள்ளி சென்னை இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பது குறித்த சமூக சுகாதார செவீலியரின் செயல்திறனை மதிப்பிடுவதற்க்கான ஒரு ஆய்வு

ஆய்வாளர் பெயர் : பெ.வான்மதி

பங்கேற்பாளர் பெயர் :

தேதி :

வயது/ பால் :

- ஆய்வாளர்கள் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழு மனதுடன் சம்மதிக்கலாம்.
- பங்கேற்பதன் நோக்கம்: இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பதற்கான ஆய்வு மட்டும் தான்.
- ஆராய்ச்சியின் நோக்கம்: இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பதற்க்கான சமூக சுகாதார செவீலியரின் செயல்திறனை மதிப்பிடுவதற்க்கான ஆய்வு
- ஆராய்ச்சி மேற்கொள்ளும் முறை: இந்த ஆராய்ச்சி இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பதற்க்கான சமூக சுகாதார செவீலியரின் செயல்திறனை பற்றிய கற்றுத்தந்தவன் தாக்கத்தை அறியலாம்.
- ஆய்வாளர்க்கான பயன்: இந்த ஆய்விற்கு பின் இளம் பருவச் சிறுமிகளிடையே சீறுநீர் பாதை நோய்த் தொற்றை தடுப்பதற்க்கான முறைகள் சமூக சுகாதார செவீலியரின் செயல்திறனால் அதிகரிக்கிறது.
- ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும் உங்களின் சராசரி வாழ்க்கை முறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கிறேன்.

- இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழு மனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகி கொள்ளலாம் என்பதை தெரிவிக்கிறேன்.
- இந்த ஆராய்ச்சியில் உங்களின் தகவல்களை பாதுக்காப்பாக வைத்து கொள்கிறேன் என்பதை தெரிவிக்கிறேன்.
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும்போது உங்களை பற்றிய அடையாளம் வெளிவராது என்று உறுதி கூறுகிறேன்.

ஆய்வாளர் கையொப்பம்

தேதி:

பங்கேற்பாளர் கையொப்பம்

தேதி:

CERTIFICATE OF PLAGIARISM

This is to certify that dissertation titled **"A STUDY TO ASSESS THE IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AT SELECTED GOVERNMENT SCHOOL, CHENNAI"** of the candidate **Mrs.P.VANMATHI** for the partial fulfillment of M.Sc. Nursing Programme in the branch of **COMMUNITY HEALTH NURSING** has been verified for plagiarism through relevant plagiarism checker. We found that the uploaded thesis file from introduction to conclusion pages and rewrite shows _____% of Plagiarism (_____% uniqueness) in this dissertation.

CLINICAL SPECIALTY GUIDE

Selvi.B.Lingeswari, M.Sc(N).,M.B.A.,M.Phil.,
Reader,
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Chennai - 03.

PRINCIPAL

Mrs.A.Thahira Begum, M.Sc.(N), MBA, M.Phil.,
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CERTIFICATE FOR ENGLISH EDITING

This is to certify that the dissertation work topic titled, " **A study to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls at selected Government school, Chennai**" , done by P.Vanmathi, M.Sc(N) II year student, College of Nursing, Madras Medical College, Chennai-03 has been edited and validated for English language appropriateness.

Place :

Date :

Signature : T. Jothilakshmi

Name :

Designation:

Place:

T. JOTHILAKSHMI, M.A.,B.Ed.,
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Govt. Hr. Sec. School,
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CERTIFICATE FOR TAMIL EDITING

This is to certify that the dissertation work topic titled, " **A study to assess the impact of community health nurse initiated packages on prevention of urinary tract infection among adolescent girls at selected government school, Chennai**" , done by P.Vanmathi, M.Sc(N) II year student, College of Nursing, Madras Medical College, Chennai-03 has been edited and validated for Tamil language appropriateness.

Place :

Date :

Signature :

Name : எம். சரசு, எம்.ஏ.,எம்.எட்.,
முதுகலை பட்டதாரி ஆசிரியை (தமிழ்)

Designation :

Place : அரசினர் மேல்நிலைப் பள்ளி,
கொரட்டி, (வே.மா.) 635 602.

அனுப்புனர்:	பெருநர்:
கல்வி அலுவலர், கல்வித்துறை, பெருநகர சென்னை மாநகராட்சி, சென்னை – 3.	The Principal, College of Nursing, Madras Medical College, Chennai – 600 003.

க.து.ந.க.எண்.அ3/12099 /2019 நாள்: 21.11.2019

பொருள்:	பெருநகர சென்னை மாநகராட்சி - கல்வித்துறை - College of Nursing Madras Medical , Chennai – 03 என்ற கல்லூரியில் முதலாம் ஆண்டு பயிலும் P.Vanmathi, M.sc (N) என்ற மாணவி சென்னை பெண்கள் மேல்நிலைப்பள்ளி இராட்லர் தெரு பள்ளியில் ஆய்வு மேற்கொள்ள அனுமதி வழங்குவது - சம்பந்தமாக
பார்வை:	2. The Principal, College of Nursing, Madras Medical College, Chennai – 600 003. அவர்களின் கடிதம்.

College of Nursing, Madras Medical College என்ற கல்லூரியில் முதலாம் ஆண்டு பயிலும் P.Vanmathi M.sc(N) என்ற மாணவி இளம் பருவ சிறுமிகளுக்கு சிறுநீர் பாதை நோய்த்தொற்றைப் பாதுகாப்பதில் சமூக சுகாதாரம் பற்றிய ஆய்வு சென்னை பெண்கள் மேல்நிலைப்பள்ளி இராட்லர் தெரு பள்ளியில் பயிலும் 8 முதல் 12 வயது வரையில் உள்ள மாணவியர்களுக்கு ஜனவரி 2020 (ஒரு மாதம்) ஆய்வு மேற்கொள்வதற்கு அனுமதி வழங்கப்படுகிறது.

மேலும் மாணவ/ மாணவியர்களிடம் ஆராய்ச்சி மேற்கொள்ளும்போது தலைமை ஆசிரியரின் அறிவுரையின்படியும் பள்ளி கல்விப் பணிக்கும் எவ்வித பாதிப்பும் ஏற்படா வண்ணம் பார்த்துக் கொள்ளுமாறும் அறிவுறுத்தப்படுகிறது.

22/11/19

for கல்வி அலுவலர்

நகல் :

1. தலைமை ஆசிரியர், சென்னை பெண்கள் மேல்நிலைப்பள்ளி இராட்லர் தெரு.

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by VANMATHI.P, M.ScNursing II year student, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the impact of community health nurse initiated packages on prevention of Urinary Tract Infection among Adolescent Girls at selected Government School,Chennai."** has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

INSTITUTE OF COMMUNITY MEDICINE
MADRAS - 600 003
MADRAS MEDICAL COLLEGE

Signature with seal
PROFESSOR
Institute of Community Medicine
Madras Medical College
Chennai-600 003.

Name : Dr Joy Patricia Pushparani

Designation : Professor of Community Medicine

College : Madras Medical College, Chennai

Place :

Date :

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by VANMATHI.P, M.Sc Nursing II year student, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the impact of community health nurse initiated packages on prevention of Urinary Tract Infection among Adolescent Girls at selected Government School, Chennai."** has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

Apollo College of Nursing
Apollo College of Nursing
Chennai - 600 095

Name : Banumathi. k.

Designation: Asst. Prof.

College : Apollo college of Nursing,

Place : Chennai-95

Date : 28/12/19

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by VANMATHI.P, M.Sc Nursing II year student, College of Nursing, Madras Medical College which is to be used in her study titled **"A study to assess the impact of community health nurse initiated packages on prevention of Urinary Tract Infection among Adolescent Girls at selected Government School, Chennai."** has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

S. KANCHANA M.Sc.,(N)
Associate Professor
MADHA COLLEGE OF NURSING
KUNDRATHU, CHENNAI-600 069.

Name : MRS. KANCHANA. S

Designation: ASSOCIATE PROFESSOR

College : MADHA COLLEGE OF NURSING
KUNDRATHUR, CH – 69

Place : CHENNAI

Date : 23/12/19

LETTER SEEKING EXPERT OPINION FOR CONTENT VALIDITY

From

P.Vanmathi,
M.Sc.,(Nursing) II Year Student,
College of Nursing,
Madras Medical College,
Chennai -03.

To

S.Kanchana, M.Sc(N),
Associate professor,
Madha College of Nursing,
Kundrathur,
Chennai-69.

Through,

Principal, College of Nursing, Madras Medical College, Chennai -03.

Respected Madam,

Sub: Request for expert opinion and suggestion for content validity of the tool-reg.

I,P.Vanmathi, M.Sc Nursing II Year student of College of Nursing, Madras Medical College, Chennai -03,affiliated to the TheTamilnaduDr.M.G.R. Medical University,Chennai have to complete my dissertation as a partial fulfillment of the requirement in the M.Sc Nursing programme.
The title is **"A study to assess the impact of community health nurse initiated packages on prevention of Urinary Tract Infection among Adolescent Girls at selected Government School, Chennai."**

Herewith,I have enclosed the developed socio demographic variables and semi-structured tool for content validity , expert opinion and valuable suggestions.

Thanking You,

Yours faithfully,
P.Vanmathi
(P.VANMATHI)

Forwarded
PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

Enclosures
1.Statement and objectives of the study
2.Tool for data collection
3.Content validity certificate

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003

EC Reg.No.ECR/270/Inst./TN/2013/RR-16
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To
VANMATHI P
M.Sc (N) I Year
College of Nursing
Madras Medical College
Chennai-600003.

Dear VANMATHI P,

The Institutional Ethics Committee has considered your request and approved your study titled **"A STUDY TO ASSESS THE IMPACT OF COMMUNITY HEALTH NURSE INITIATED PACKAGES ON PREVENTION OF URINARY TRACT INFECTION AMONG ADOLESCENT GIRLS AT SELECTED GOVERNMENT SCHOOL, CHENNAI"-NO.29112019.** The following members of Ethics Committee were present in the meeting held on **12.11.2019** conducted at Madras Medical College, Chennai 3.

1. Prof.P.V.Jayashankar :Chairperson
2. Prof.R.Jayanthi,MD.,FRCP(Glasg)., Dean,MMC,Ch-3 :DeputyChairperson
3. Prof.N.Gopalakrishnan,MD.,DM.,FRCP, Vice Principal Director,Inst.of Nephrology,MMC,Ch : Member Secretary
4. Prof.Bharathi Vidya Jayanthi,Vice Principal Director,Inst. of Pathology,MMC,Ch- : Member
5. Prof.R.Muthuselvan,MD,Prof. Inst. of Int.Med,MMC, Ch-3 : Member
6. Prof.Alli, Prof. Inst. of Gen.Surgery,MMC : Member
7. Prof.Shobha, Prof, Inst.of O&G, Chennai : Member
8. Prof.Rema Chandramohan,Prof.of Paediatrics,ICH,Chennai : Member
9. Prof. Sudha, Prof. Inst. of Pharmacology,MMC,Ch-3 : Member
10. Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3 : Member
11. Prof. S.Lakshmi, Prof. of Paediatrics ICH Chennai : Member
12. Thiru S.Govindasamy, BA.,BL,High Court,Chennai : Lawyer
13. Tmt.Arnold Saulina, MA.,MSW., :Social Scientist
14. Thiru K.Ranjith, Ch- 91 : Lay Person

We approve the proposal to be conducted in its presented form.

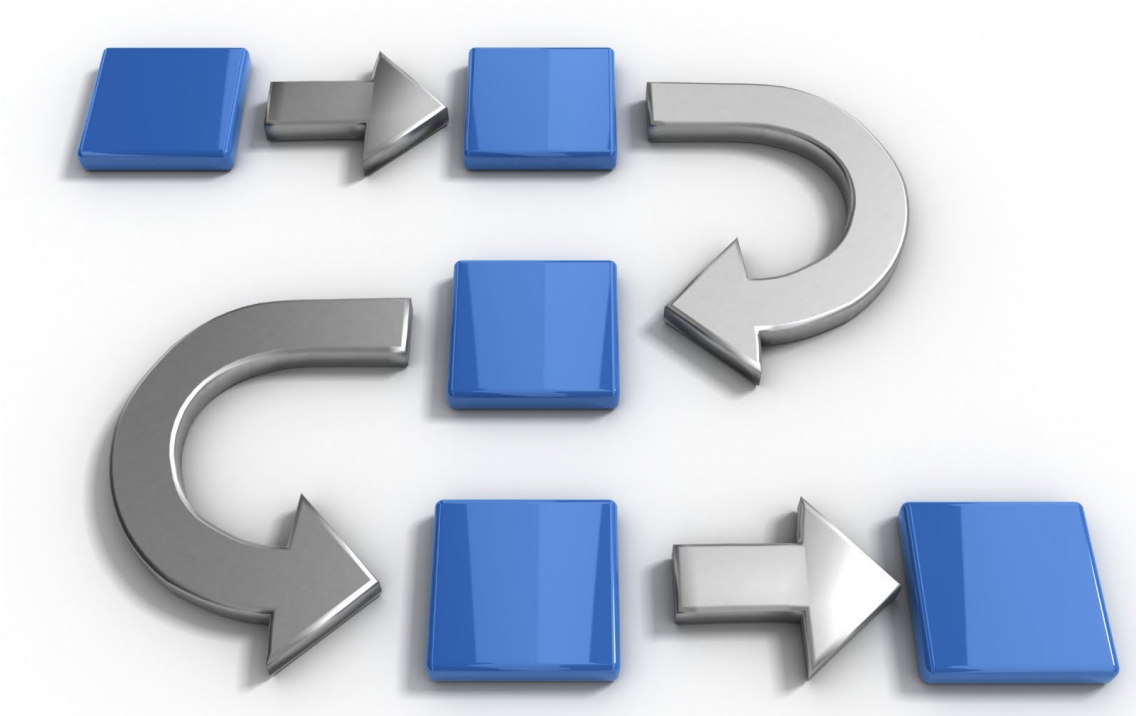
The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary – Ethics Committee

Chapter-I
Introduction

Chapter-II
Review of Literature

Chapter-III
Research Methodology

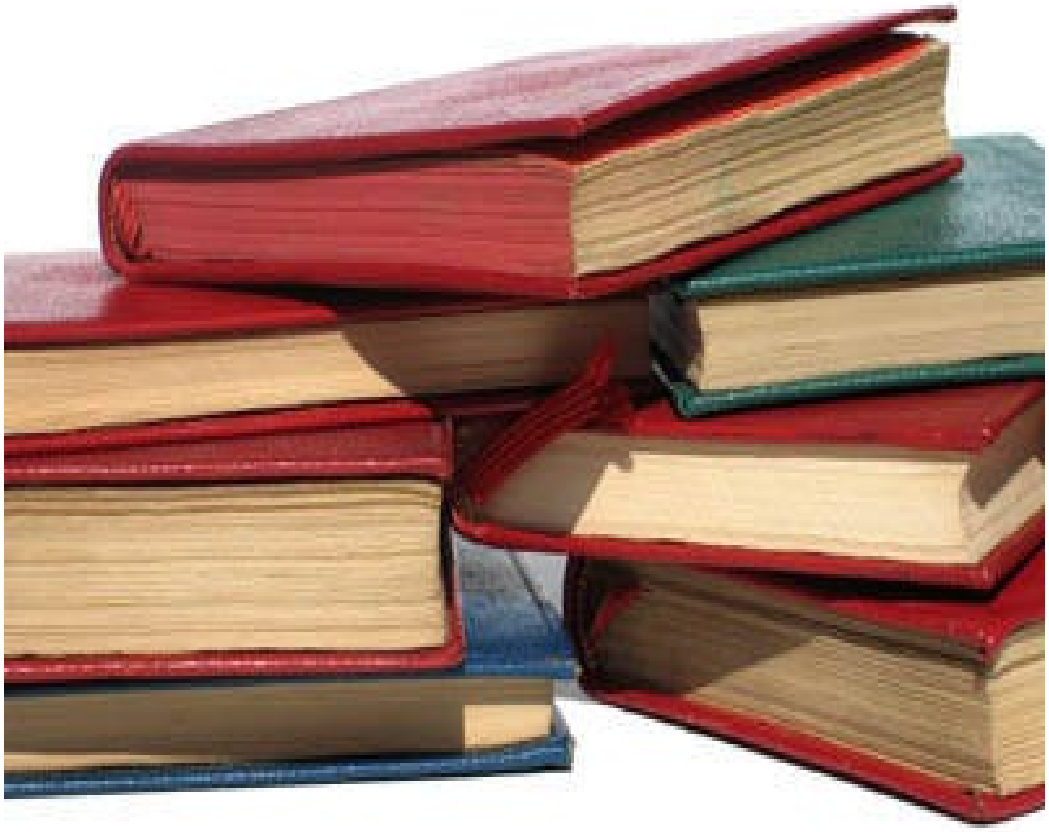


Chapter-IV
Data Analysis & Interpretation

Chapter-V
Discussion

Chapter-VI
Summary, Implication, Recommendation, Limitation & Conclusion

References



Appendices


Tuesday
URINARY SYSTEM


Tuesday
URINARY SYSTEM


Tuesday
URINARY SYSTEM