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To Assess the Effectiveness of Structure Teaching Programme on Knowledge Regarding Prevention of Urinary Tract Infection Among the G.N.M. 1st Year Student in Integral Institute of Nursing Sciences & Research, Lucknow U.P.

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ABSTRACT

A Pre-experimental study-one group pre test and post test design was selected for the study, which was conducted on 60 GNM first year nursing students of **Integral Institute Of Nursing Sciences & Research, Lucknow U.P.** through Random sampling technique. Data was collected through using a self-structured knowledge questionnaire. Researcher introduced her and explained the purpose of study to the sample. Written informed Consent was taken from each sample. Pretest was administered to the group followed by structured teaching programme which took about 45 minutes. Post test was taken after one week of administration of structured teaching programme.

KEYWORDS: *Effectiveness, Knowledge, Prevention of urinary tract infection, and Information Education and Communication.*

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INTRODUCTION

BACKGROUND OF THE STUDY

Urinary tract infections (UTIs) are a severe public health problem and are caused by a range of pathogens, but most commonly by *Escherichia coli*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *Enterococcus faecalis* and *Staphylococcus saprophyticus.* High recurrence rates and increasing antimicrobial resistance among uropathogens threaten to greatly increase the economic burden of these infections. In this Review, we discuss how basic science studies are elucidating the molecular details of the crosstalk that occurs at the host–pathogen interface, as well as the consequences of these interactions for the pathophysiology of UTIs. We also describe current efforts to translate this knowledge into new clinical treatments for UTIs.

Urinary tract infections (UTIs) are some of the most common bacterial infections, affecting 150 million people each year worldwide1. In 2007, in the United States alone, there were an estimated 10.5 million office visits for UTI symptoms (constituting 0.9% of all ambulatory visits) and 2–3 million emergency department visits2–4. Currently, the societal costs of these infections, including health care costs and time missed from work, are approximately US$3.5 billion per year in the United States alone. UTIs are a significant cause of morbidity in infant boys, older men and females of all ages. Serious sequelae include frequent recurrences, pyelonephritis with sepsis, renal damage in young children, pre-term birth and complications caused by frequent antimicrobial use,

such as high-level antibiotic resistance and Clostridium difficile colitis

Urinary tract infection (UTI) commonly affects the adolescent girls because of the onset of menarche, dysfunctional voiding patterns, use of synthetic underwear, tight jeans, and poor hygiene. The infection in the urinary tract will produce the signs and symptoms like fever, dysuria, urgency and suprapubic pressure or discomfort, flank pain, chills, etc. Acute uncomplicated urinary tract infection is more prevalent 2 among adolescent girls and is the fourth main reason for out-patient visit among this group. It is estimated that 150 million occur yearly on a global basis, resulting in more than six billion dollars in direct health care expenditures. Incidence of urinary tract infection is 34% of adult below 20 years and also 794 per 10,000 adults aged below 20 years have at least one occurrence of urinary tract infection. (David Wilson., 2009).

Urinary tract infections (UTIs) are the inflammatory disorders of the urinary tract caused by the abnormal growth of pathogens. Urinary tract infection is known to cause short-term morbidity in terms of fever, dysuria, and lower abdominal pain (LAP) and may result in permanent scarring of the kidney. Urinary tract infections can be community acquired or nosocomial. Community-acquired urinary tract infections (CA-UTIs) are defined as the infection of the urinary system that takes place in one's life in the community setting or in the hospital environment with less than 48 hours of admission.

Community-acquired UTI is the second most commonly encountered microbial infection in the community setting. Nosocomial urinary tract infections (N-UTIs) are the infection of the urinary tract that occurs after 48 hours of hospital admission, and the patient was not incubating at the time of admission or within 3 days after discharge.

NEED OF THE STUDY

Students are not having proper knowledge regarding urinary tract infection. They are unable to analyze or observe the sign and symptoms, causes, risk factors and they lack the knowledge regarding preventive measures of urinary tract infection.

According to National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey Within their lifetime, one in three women will experience a urinary tract infection and 50% experience at least one UTI during their lifetime'

UTIs are most general bacterial infection in women. They occurs most frequently between ages of 16-35 year with 10% of women getting infection yearly & 60%having infection at some point in their life. More frequently in female then males, so it is important to treat UTIs

Out of total 732 patients, isolates were detected in 314 (42.89%) samples. Out of these, 64.01% were female. Most common microbial agent isolated was Escherichia coli was highly resistant to ciprofloxacin to amikacin and ceftriaxone. They study concluded that pattern of resistance to commonly used antibiotics for treating urinary tract infection alerts us against indiscriminate used of antibiotics.

Urinary tract infections may be asymptomatic, acute, chronic, and complicated or uncomplicated, and the clinical manifestations of UTIs depend on the portion of the urinary tract involved, the etiologic organisms, the severity of the infection, and the patient's ability to mount an immune response to it. Both asymptomatic and symptomatic UTIs pose a serious threat to public health care, hence reducing the quality of life and resulting into work absenteeism. The symptoms of UTIs such as fever, burning sensations while urinating, LAP, itching, formation of blisters and ulcers in the genital area, genital and suprapubic pain, and pyuria generally depend on the age of the person infected and the location of the urinary tract infected.

Urinary tract infection (UTI) defined as significant bacteriuria in the presence of a constellation of symptoms of dysuria (painful urination), increased urinary frequency and urgency, suprapubic discomfort and costovertebral angle tenderness. It is a common cause of infections, particularly among young girls. They develop a urinary tract infection before the age of 24 years. (Nicolle L.E., 2008)

UTI are usually caused by bacteria from gastrointestinal tract entering the urethra and ascending into the bladder. The most common causative organism pathogen is uncomplicated UTIs, is Escherichia coli, staphylococcus saprophyticus accounts for 5%-10% of cases and occasionally other enterobacteriacee, Klebsiella species are isolated'. Out of 1000 samples, 210 (21% samples were found positives for UTI isolates. Out of 210 positive cases, the prevalence of UTI was higher in females (56.19%) than in males (43.81%). The highest susceptible age group of patients to UTI was found to be 21-40 years (33.33%).the highest prevalence of UTI in female patient was found in the age group of 21-40 years (44.92%) while in male patients the highest susceptible age group to UTI was above 60 years (35.87%).

TITLE OF THE STUDY

"A study to assess the effectiveness of structured teaching programme on knowledge regarding

prevention of urinary tract infection among the GNM 1st Year students in Integral Institute of Nursing Sciences & Research, Lucknow U.P."

OBJECTIVES

1. To assess the knowledge regarding prevention of urinary tract infection among GNM 1st Year students of IINS&R.
2. To assess the effectiveness of structured teaching programme among GNM 1st Year students of IINS&R.
3. Associate between the level of knowledge regarding prevention of urinary tract infection among GNM 1st Year students with selected demographic variables.

HYPOTHESIS

H1: There is a significant difference between pre-test and post-test knowledge scores regarding the urinary tract infection among the GNM 1st year students.

H2: There is a significant association between post test score and selected demographic variable.

H0: There is no significant difference between pre-test and post-test knowledge

OPERATINAL DEFINITION

Assess: In this study, it refers to finding the level of the knowledge regarding prevention of urinary tract infection among GNM 1st year students.

Effectiveness: In this study it measure the improvement scores in post-test when compare with the pre-test scores after exposing to structure teaching program.

Structured teaching programme: it is a systemic teaching to impact knowledge or instructs someone as how to do something.

In this study it refers to well-structured teaching instruction which include introduction, definition, incidence, risk factor clinical manifestation, diagnostic evaluation and management of patient with urinary tract infection.

Knowledge: fact, information and skill require through experiences or education; the theoretical and practical understanding of a subject.

In this study the correct response of GNM 1st Year students to the questionnaire regarding prevention of urinary tract infection as measured by the scores.

Urinary Tract Infection: It refers to bacterial invasion and multiplication involving the kidney and urinary tract pathway. The presence symptoms of dysuria, odor and suprapubic discomfort.

Prevention: In this study providing an information and education, which helps the GNM 1st Year students from growth of microorganisms in the urinary tract.

ASSUMPTIONS

Most students have some knowledge regarding prevention of Urinary tract infection.

Information education and communication on prevention of urinary tract infection will help GNM 1st Year students to improve their knowledge.

Nursing students will have interest to know more about the urinary tract infection.

Structured teaching programme may an effective method for imparting knowledge regarding urinary tract infection.

DELIMITION

This study is delimited to GNM 1st year students at integral Institute of nursing sciences and research, Lucknow, U.P

ETHICAL CONSIDERATION

Written permission has been taken from principal office, Integral Institute of Nursing Sciences & Research, Lucknow, U.P

Written permission was obtained by ethical committee, Integral University

Written permission was obtained from the sample and data will be confidential

CONCEPTUAL FRAMEWORK

The conceptual framework used for this study is based on general system model approach. It was developed by Ludwig Bertanlanffy (1968) and modified by J.W.Kenny and it is called Open System Model. According to the general system theory a system consists of a set of interacting components. There are two types of general system i.e. closed and open. In this present study B.Sc. 3rd year students considered as a system with the element with variable factor related knowledge regarding urinary tract infection while interacting with GNM 1st year students in determining their knowledge and effectiveness.

INPUT

Input is defined as any information, energy, or material that enters into the system through its boundary. It is a process by which a system is able to communicate and react with its environments.

In this study the input was to maintain its knowledge.

In this study the information related to urinary tract infection has given, which has two components:-

Demographical data

Structured teaching programme on urinary tract infection.

THROUGHPUT

Throughput is the process that occurs at some point between input and output process, which enables the input in such a way that, it can be readily used by the system.

In this present study throughout considering out processing of unit which are pre-test and structured teaching programme and post-test regarding the knowledge of urinary tract infections.

OUTPUT

It is the end product of a system. The energy, matter or information is given out by the system as a result of its processes.

In this study output is the post-test knowledge score among the GNM 1st year students which is divided into 3 groups such as good, poor and average.

FEEDBACK

Feedback is the difference in much percentage of pre and post-test knowledge score of GNM 1st year students regarding urinary tract infections knowledge.

REVIEW OF LITERATURE

A literature review is a defined as a broad, comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed or audiovisual material and personal communication. (S.K. Sharma, 2005)

Review of literature is an important step in the development of a research project. Prior to start with any research study the researcher can get information related to the study topic, by means of reviewing the previous study and other book or journal literature related to the selected study in order to know about the study topic in depth. Thus, review of literature helps the investigator to develop the deeper insight into the problem, and gain information on the problem and helps to identify what has been done before and also looks into the feasibility of the pre sent study, constraints of data collection, relates the findings from one study to another with a hope to establish a comprehensive body of scientific knowledge in the professional discipline from which, valid and pertinent theories may be developed.

The review of literature is presented under the following headings:

Section 1: Study related to the knowledge regarding prevention of urinary tract infection among GNM 1st Year students of IINS&R

Section 2: Study related to the effectiveness of structured teaching programme among GNM 1st Year students of IINS&R

Section 3: Study related to the urinary tract infection among GNM 1st Year students of IINS&R

SECTION 1: Study related to the knowledge regarding prevention of urinary tract infection among GNM 1st Year students of IINS&R

Dr. Tabassum F, Md. Manik Nur I, et al (2020), conducted a study to assessment of knowledge and awareness regarding urinary tract infection among the university students of Bangladesh. The objective of the study is to determine the knowledge and awareness about urinary tract infection among the university students of Bangladesh among 403 students by using demographic perform and structure questionnaires based on group to determine the association between their knowledge and selected demographical data. The result showed that 76.92% of respondents correctly identified bacteria as the principle pathogens forming urinary tract infection s and 80.15% suggested antibacterial drugs for the treatment of urinary tract infections. (20)

Hussein Tm, Ibrahim Rh, et.al, (2019), conducted a cross sectional study to assess the knowledge regarding urinary tract infection in the nursing student at the University of Mosul among 120 students. A self-administered structured questionnaire, which contains 16 items to assess the knowledge regarding preventative measure of urinary tract infection and other demographic details. The result of the study showed that 40.8% of the responds were belonged to the age group (20-22) years old more than half of them (55%) were females and the majority of them (86.7%) were single. The whole study conducted that the general level of knowledge among the participants was overall 52.5% of the 120 participants had moderate level of knowledge, while 36.7% of them had poor knowledge regarding preventative measure of urinary tract infection. (21)

G. Varesh ,C Shriharsha et.al, (2018) conducted a simple random sampling technique study to assess the effectiveness of structure teaching program programme on knowledge regarding catheter care to prevent urinary tract infection among B.Sc. nursing students at BVVS Sajjalashree Institute of nursing sciences Bagalkot among 108 enrolled nurses by pre-test and post-test the findings were64% spontend had poor knowledge on catheter care to prevent urinary tract infection are t=20.82,p<0.05 of the second year B.Sc. nursing student and there socio demographic variable the conclusion of the study the present study was found that structure teaching program was very effective teaching method. (22)

SECTION 2: Study related to the effectiveness of structured teaching programme among GNM 1st Year students of IINS&R

Agarwal A. Reddy G.S (2021) conducted a quantitative research study to assess the effectiveness of planned teaching program on knowledge and practice regarding prevention of urinary tract infection among adolescent girls at selected schools of Jaipur. The objective of study to assess knowledge regarding prevention of urinary tract infection among adolescent girls using experimental and control group before and after the administration of planned teaching program. The 300 samples were selected by using sampling technique for the study, demographic data, structured questioners, and self-reported practice check list was prepared as a tool for collecting data. The statically finding shows that the overall mean awareness score of the study participants was 12.29 ± 4.26. Percentage distribute urinary tract infection on of knowledge level shows that majority (90%) of adolescents had moderately adequate knowledge and 5.6% of them had inadequate knowledge, whereas only 4.3% of adolescents had adequate knowledge on prevention of urinary tract infection. (25)

Chandrika K. Deepak B.V. (2019), conducted a quasi-experimental study to evaluate the effectiveness of structured teaching programme on knowledge regarding urinary tract infection [urinary tract infection] & its prevention among adolescent girls in selected senior secondary schools. The objective of the study to evaluate the effectiveness of structured teaching programme regarding urinary tract infection [urinary tract infection] & its prevention among adolescent girls. The sample consisting of 140 adolescent girls by using simple random sampling. The tool comprised of structured self-administered questionnaire. The mean score of post-test knowledge 32.77 (91.03%) was apparently higher than the mean score of pre-test knowledge score 16.60 (46.11%), suggesting that the structured teaching programme was effective in increasing the knowledge of the adolescent girls regarding urinary tract infection [urinary tract infection] & its prevention. The results showed that the structured teaching programme was highly effective. So that the urinary tract infection [urinary tract infection] can be prevented. (26)

Pascal A, Mariam A, et.al, (2019), conducted a quantitative research study to assess the effectiveness of structure teaching program on prevention knowledge regarding urinary tract infection in Kollam district. To assess the knowledge regarding prevention of urinary tract infection among 60 adolescent girls by using demographic profoma and structured questionnaire based on one group. Pre-test Post -test research design. The mean Standard deviation, t' value of pre-test and post-test on knowledge regarding prevention of urinary tract infection when t (59) = 2.00, significant at 0.05 level shows that the mean post-test score (14.35) is greater than mean pre-test score (9.28). The study showed that structure teaching program was effective to increase the knowledge regarding prevention of urinary tract infection. (27)

SECTION 3: Study related to the urinary tract infection among GNM 1st Year students of IINS&R

Pritam Pardeshi, (2018) Conducted a retrospective study on Prevalence of Urinary Tract Infections and Current Scenario of Antibiotic Susceptibility Pattern of Bacteria Causing Urinary Tract Infection among 1741 adolescent girls in Mumbai. Over-all prevalence of urinary tract infection was 33.54%, of which 66.78% were females. E.coli 53.77% was the commonest isolate causing urinary tract infection followed by Klebsiella pneumonia 27.40%. The most effective antimicrobial agents in our study were Meropenem, Gentamycin, Nitrofurantoin co-trimoxazole whereas higher resistance was observed. This study concluded that as drug resistance among bacterial pathogens varies with time, regular surveillance and monitoring is necessary for giving updated information to physicians for most effective empirical treatment of urinary tract infection. (30)

Srivastava S. (2018) conducted a study to assess analytical study of urinary tract infection in adolescent girls. The objective of this study to assess the level of triage skill & associated factor like water intake, infrequent voiding and poor menstrual, sexual hygiene have been implicated in UTI during adolescent. The need is to educate the adolescent girls regarding good hydration & hygiene by using demographic perform and structured questionnaires. A total of 60 adolescent girls participated in the study. The most common symptoms was burning during micturition which was present in 60% girls. (31)

Muthulakshmi M., Gopalakrishnan S., (2017) conducted a quantitative study to urinary tract infection among females of reproductive group in a rural area in Kanchipuram district (T.M), 2093 females, A descriptive research approach pretested structured questionnaire, consisting of the socio demographic data and self-reported, the result shows to be total affected 20.4 % there was a strong statistical significant association between level of education of the study. The conclusion shows urinary tract infection is a serious condition in public health problem if it's untreated. Early diagnosis and prompt treatment will prevent the chances of developing

further complications of urinary tract infection and will help to reduce the sufferings of the patient, hospital-stay and economic loss. (32)

RESULTS

Analysis and interpretation was done in accordance with the objectives laid down for the study. The purpose of analysis is to reduce the data into an interpretable and meaningful form so that the result can be compared and significance can be identified.

This chapter deals with the analysis and interpretation of data collected. The data was analyzed by calculating the score in terms of frequency, percentage mean, standard deviation, chi-square and paired t-test.

Plan of Analysis:

Analysis and interpretation of data was done according to the objectives using descriptive and inferential statistics. The level of significance chosen was at $p<0.05$.

Organization of Analyzed Data:

The analyzed data was organized according to the objectives and presented under the following sections:

SECTION: A

Description of demographic profile

This section describes the demographic characteristics of the sample under study. The data obtained describes the characteristics pertaining Age, Gender, Locality, Marital Status, Educational Status, Any knowledge regarding UTI, Have you experience UTI.

Table 1: demographic profile of the subjects

Variables	Options	Frequency	Percentage
Age	17 – 19 years	36	60
	20 years and above	24	40
Gender	Male	7	11.7
	Female	53	88.3
Locality	Rural	36	60
	Urban	24	40
Marital Status	Married	2	3.3
	Unmarried	58	96.7
Educational Status	Intermediate	56	93.3
	Others	4	6.7
Any Knowledge regarding UTI	Yes	16	26.7
	No	44	73.3
Have you experience UTI	Yes	0	0.0
	No	60	100

Table finding were as follows:

As per showing the percentage distribution according to, there Age are 17-19 years age group is 60% and Above 20 years is 40%.

As per showing the percentage distribution according to, there gender in male are 11.7% and female are 88.3%.

As per showing the percentage distribution according to, there locality in rural are 60% and urban are 40%.

As per showing the percentage distribution according to there marital status in married 3.3% an unmarried 96.7%.

As per showing the percentage distribution according to there educational status in intermediate 93.3% and other are 6.7%.

As per showing the percentage distribution according to there level of knowledge regarding UTI, those who have knowledge is 26.7% and those who have do not have knowledge are 73.3%.

As per showing the percentage distribution according to their previous experience is 0% and 100% those who have didn't experienced the UTI.

SECTION - B

To assess the effectiveness of structured teaching program and knowledge regarding prevention of UTI among GNM 1st year students of IINS&R.

Table -2: Comparison of frequency & percentage distribution of pre-test and post-test level of knowledge

CRITERIA MEASURE OF KNOWLEDGE SCORE				
SCORE LEVEL (N=60)	PRETEST		POSTTEST	
	Frequency	Percentage	Frequency	Percentage
Inadequate knowledge (0-10)	50	83.3	16	26.7
Moderate knowledge (11-15)	10	16.7	33	55
Adequate knowledge (16-20)	0	0	11	18.3

Table finding shows the comparison of frequency and percentage distribution of pre-test and post-test level of knowledge in which majority 50 (83.3%) had inadequate knowledge, 10(16.7%) had moderate level of knowledge and 0(0%) had adequate knowledge in pretest while post-test shows that majority 33(55%) had moderate level of knowledge, 16(26.7%) had 16(26.7%) inadequate and 11(18.3%) had adequate knowledge.

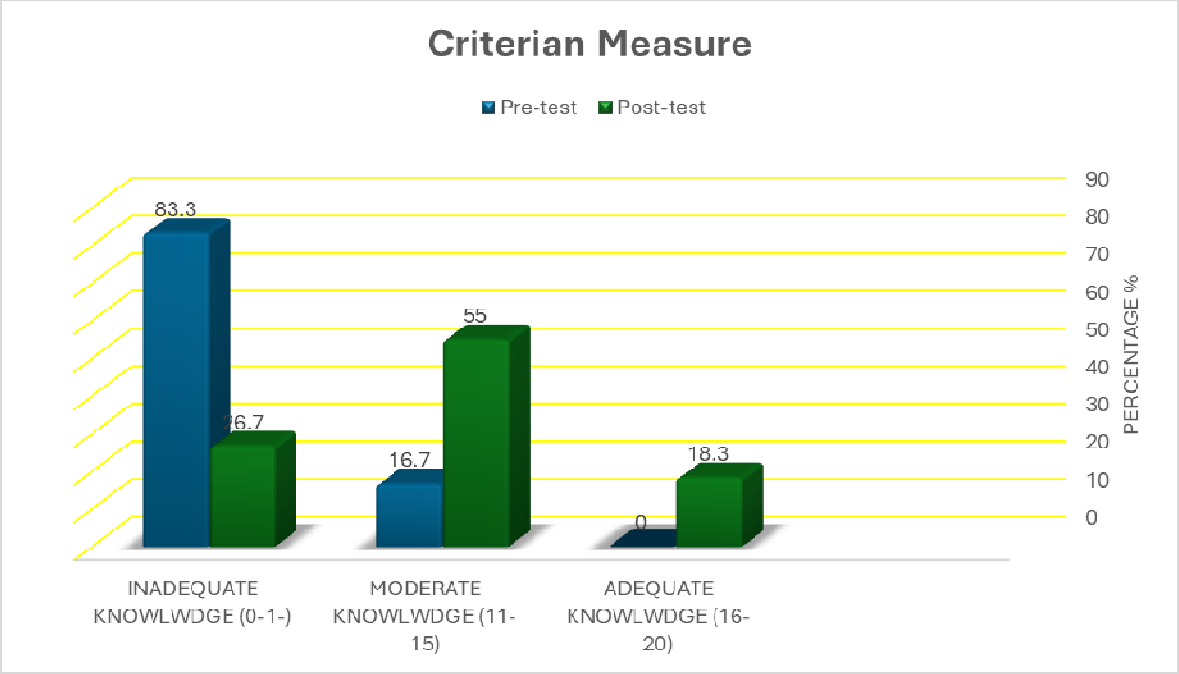

Figure no. 1: Diagram representing comparison of percentage distribution ofpre-test and post-test level of knowledge

Table -3: Comparison of descriptive statistics of pre-test and post-test Scores of knowledge

N=60

Paired T test	Mean±S.D	Mean%	Range	Mean Diff.	Paired T test	P value	Table Value at 0.05
PRETEST KNOWLEDGE	8.75±1.865	43.80	05-12	3.85	8.865 *sig	<0.001	2.00
POSTTEST KNOWLEDGE	12.6±2.695	63.00	8-18				

***Significance level 0.05** **maximum=20 minimum=0**

Table finding shows descriptive statistics comparison of pre-test and post-test score of knowledge level where based on pre-test knowledge the mean score is 8.75, standard deviation was 1.865 with mean% of 43.80 whereas in post-test mean value is 12.6 with 2.695 standard deviation and mean% was 63.00. the Mean difference was 3.850.

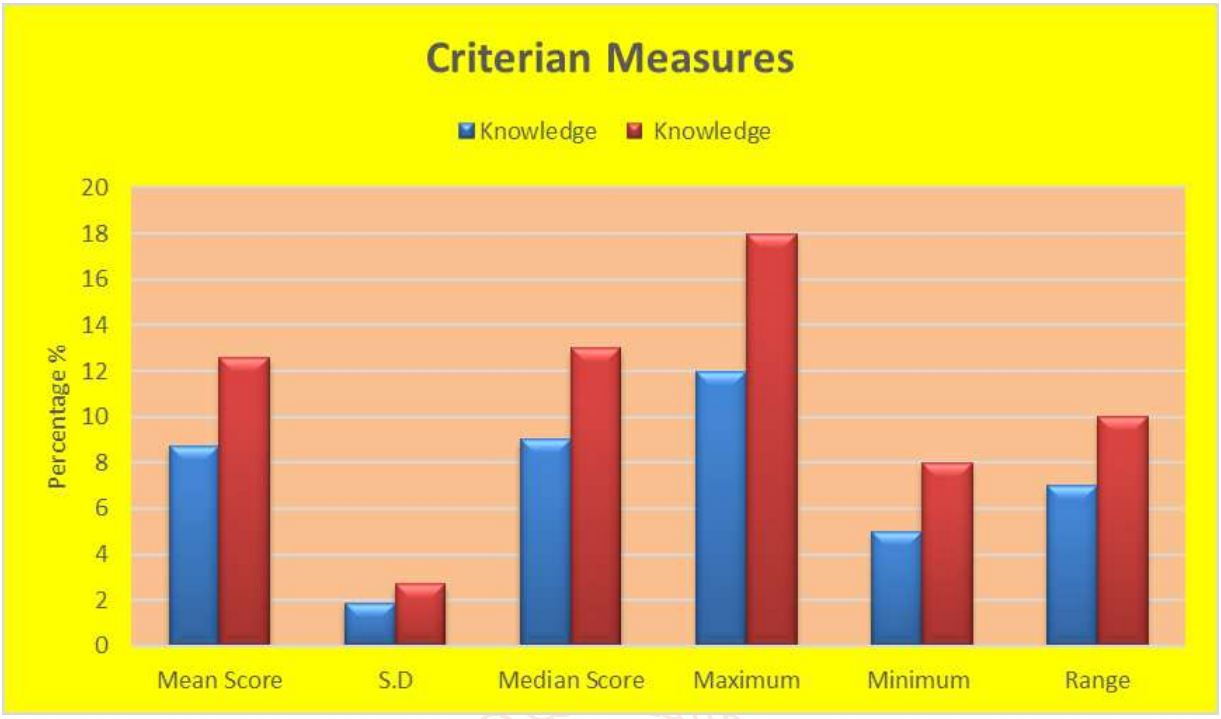

Figure no. 2: Bar diagram representing comparison of descriptive statistics of pre-test and post-test knowledge scores

Table -4: Comparison of descriptive statistics of pre-test and post-test Scores of knowledge

DIAGRAM SHOWING INDIVIDUAL SCORE GAIN (EFFECTIVENESS)						
Mean %	**Pre-test knowledge**	**Post-test knowledge**	**Difference**	**Pre-test knowledge score %**	**Post-test knowledge score %**	**Difference %**
Average	8.75	12.6	3.85	43.75	63	19.25

Table shows the effectiveness of structured teaching programme regarding urinary tract infection among GNM 1 year student at integral institute of nursing science and research. The difference of pre-test knowledge and post-test knowledge was found to be at 19.25%.

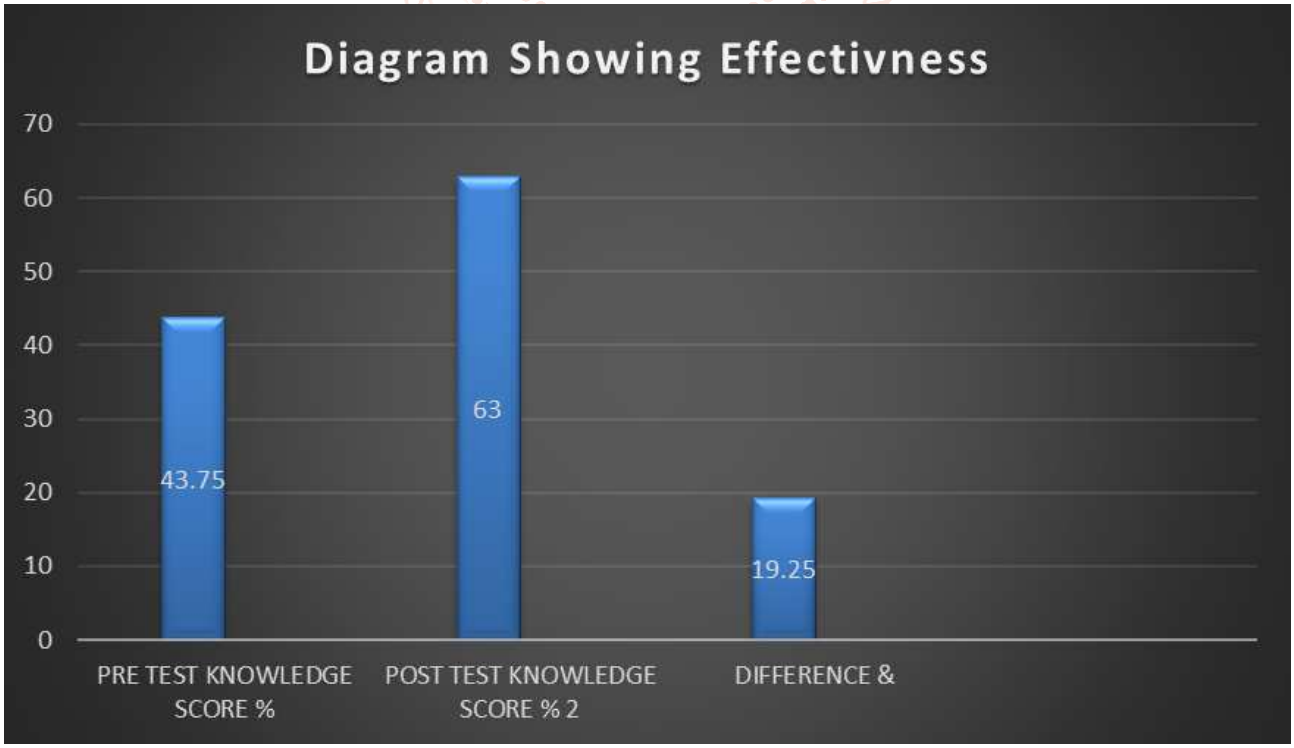

Figure no. 3: Bar diagram-representing comparison of pre-test and post-test level of knowledge representing effectiveness

SECTION - C

Associate between the level of knowledge regarding prevention of urinary tract infection among GNM 1st year students with selected demographic variables.

Table -5: Table Showing Association of Scores and Demographic Variables.

ASSOCIATION OF POST-TEST KNOWLEDGE SCORES WITH SELECTED SOCIO-DEMOGRAPHIC VARIABLES.									
Variables	**Options**	**Adequate Knowledge**	**Moderate Knowledge**	**Inadequate Knowledge**	**Chi Test**	**P Value**	**Df**	**Value Table**	**Result**
Age	17-19 years	6	19	11	0.728	0.695	2	5.991	Not Significant
	20 years and above	5	14	5					
Gender	Male	0	5	2	1.852	0.396	2	5.991	Not Significant
	Female	11	28	14					
Locality	Rural	5	23	8	2.929	0.231	2	5.991	Not Significant
	Urban	6	10	8					
Marital status	Married	0	1	1	0.811	0.667	2	5.991	Not Significant
	Unmarried	11	32	15					
Educational status	Intermediate	11	29	16	3.056	0.173	2	5.991	Not Significant
	Others	0	4	0					
Any Knowledge regarding UTI	Yes	4	4	8	8.554	0.014	2	5.991	Not Significant
	No	7	29	8					
Have you experience UTI	Yes	0	0	0		N.A		N.A	
	No	11	33	16					

This section deals with the findings related to the association between score and selected demographic variables. The chi-square test was used to determine the association between the score levels and selected demographic variables.

The Chi-square value shows that there is not significance association between the score level and Age as variables. The calculated chi-square values (0.728) were less than the table value 5.991 at the 0.05 level of significance with 2df.

The Chi-square value shows that there is not significance association between the score level and gender as variables. The calculated chi-square values (1.852) were less than the table value 5.991 at the 0.05 level of significance with 2df.

The Chi-square value shows that there is not significance association between the score level and locality variables. The calculated chi-square values (2.929) were less than the table value 5.991 at the 0.05 level of significance with 2df.

The Chi-square value shows that there is significance association between the score level and any knowledge regarding UTI as variables. The calculated chi-square values (8.554) were more than the table value 5.991 at the 0.05 level of significance with 2df.

The Chi-square value shows that there is significance association between the score level and marital status as variables.

The calculated chi-square values (0.811) were less than the table value 5.991 at the 0.05 level of significance with 2df.

The Chi-square value shows that there is significance association between the score level and educational status as variables. The calculated chi-square values (3.506) were less than the table value 5.991 at the 0.05 level of significance with 2df.

NURSING IMPLICATION

DISCUSSION

Title of study

"To assess the effectiveness of structured teaching programme on knowledge regarding prevention of urinary tract infection among the GNM 1ª year student in integral institute of nursing sciences & research, Lucknow up."

Objective: To assess the knowledge regarding prevention of UTI among GNM 18t year student at IINS&R

To assess the pre-test level of knowledge on structure questionnaire was prepared by the researchers. This tool contains three criteria adequate, moderate and

inadequate knowledge. With the help of structured questionnaire researchers collect data regarding UTI. Researchers prepared structured questionnaire to assess the knowledge of GNM 1st year students. After collecting data, the information has been given to the nursing professionals, who are expert in Medical Surgical Nursing (M.S.N) field, for the validation.

Another study conducted by Hussein, Ibrahim etal(2019) to assess the knowledge regarding UTI in nursing student at the university of mosul with sample size of 120 using a cross sectional study. The finding of study highlights that the 40.8% of responds are belong to the age group (20-22) year half of them are female (55%) and majority of them are single (86.7%, the general level of knowledge among the participants were overall 52.5% of the student had moderate level of knowledge, 36.7% of them had poor knowledge regarding prevention of UTI.

A. Discussion on the finding related to the knowledge of UTI among GNM 1% year student.

Pre-test score knowledge 83.3% inadequate and 16.7% moderate knowledge.

Indhumol TD, sheela pavithran etal(2014) conducted a study to assess the effectiveness of STP on knowledge regarding prevention of UTI and the sample size is 119 adolescent girls by using cluster sampling technique. The study result showed difference in gain in knowledge regarding prevention of UTI (+117) = 4.973, p>0.001). The study shows a prompt result in improving the knowledge through STP.

Objective: To assess the effectiveness of STP among GNM 1 year student at INS&R.

B. Discussion on finding related to effectiveness of structured teaching program on knowledge regarding prevention of UTI among GNM 1" year student.

Pre-test score among 60 GNM 18 year students is 50 (83.3%) inadequate knowledge, 10(16.7%) moderate knowledge and 0 (0%) adequate knowledge.

Post-test score among 60 GNMist year students 16(26.7%) inadequate knowledge, moderate 33(55%) were moderate level of knowledge and 11(18.3%) adequate knowledge.

Agarwal a. reddy G.S (2021) conducted a quantitative research study to assess the effectiveness of structured teaching program on knowledge prevention of UTI among adolescent girls at Jaipuria School. The objective of the study is to assess knowledge regarding prevention of UTI among adolescent girls using experimental and control group before and after the administration of structured teaching program. The 300 sample size was selected the result shows that overall mean awareness score of the study was 12+4.26. Percentage distributive UTI on knowledge level shows that majority (90%) of had moderate knowledge and 5.6% of them had inadequately knowledge whereas only 4.3% of adolescent had adequate knowledge.

OBJECTIVE: Association between the levels of knowledge regarding prevention of UTI among GNM 1% year student with selected demographic variables

C. Discussion on the finding related to association between the post-test knowledge

There is no significance association between the level of scores and other demographic variables as age. The calculated chi-square values (0.728) were less than the table value (5.991) at the 0.05 level of significance

The Chi-square value shows that there is significance association between the score level and any knowledge regarding UTI as demographic variable. The calculated chi-square values (8.554) were more than the table value (5.991) at the 0.05 level of significance.

There is no significance association between the level of scores and other demographic variables as locality. The calculated chi-square values (2.929) were less than the table value at the 0.05 level of significance

There is no significance association between the level of scores and other demographic variables as educational status. The calculated chi-square values (3.506) were less than the table value (5.991) at the 0.05 level of significance

There is no significance association between the level of scores and other demographic variables as gender. The calculated chi-square (1.852) values were less than the table value (5.991) at the 0.05 level of significance

There is no significance association between the level of scores and other demographic variable as marital status. The calculated chi-square (0.811) values were less than the table value (5.991) at the 0.05 level of significance.

SUMMARY

The present study finding suggest that all subject had moderate to high level of knowledge, 55% moderate and 18% adequate. Therefore this study was

undertaken to assess the knowledge regarding prevention of UTI among GNM 1" year student.

on this basis of the objective and conceptual framework developed a experimental study was chosen for the study. This was conducted on GNM 1 year student in Integral institute of nursing science and research, Lucknow. Data was collected through self-structured questionnaire and socio-demographic variables to assess knowledge regarding UTI. this questionnaire was administered to GNM 1 year student who were fulfill inclusive criteria and were present during data collection which were analyzed by descriptive and inferential statistics.

MAJOR FINDING

Out of 60 subject 60%, were from 17-19 years and only 40% from 20 and above.

Majority of student were female with 88.3% and male are 11.7%.

60% students are from rural area and remaining 40% from urban area.

Majority of student were intermediate level of education 93.3% and 6.7% others level of education.

Majority of student are unmarried 96.7% and 3.3% were married.

Majority of student did not have previous knowledge regarding UTI 73.3% and 26.7% have previous knowledge regarding UTI

100% student did not experience UTI

Correlation between scores and variables were calculated and found significantly at $p<0.001$.

IMPLICATION OF THE STUDY

The finding of the study can be used in the following area

Nursing education

Due to challenge health care in today's world as nurse or health care profession. It is important to be updated with knowledge in every field of education.

As a nurse educator, there are an abundant opportunities to educate the nurse about the urinary tract infection.

There should be regular periodic and STP on UTI which should be included in nursing curriculum at basic level.

Nursing practice

Nurses are the key persons of the health care team, who play major role in health promotion and health maintence.

Nursing care is an art and science in providing quality care.

Nurse play vital role in implementing structured teaching which improve their knowledge that reflects in effective health care service.

Nursing administration

Nursing administration has to plan and organize training and educational program for the staff nurses in the hospitals and continuing area on UTI which would help them to acquire as well as update knowledge and skill.

Necessary administration support has to be provided to conduct health educational workshop, seminar, conference, at school, college, university as well as community setting with appropriate AV Aids. In-service education program can be conducted for the nurses on their specialization with UTI for updated knowledge.

Nursing research

Nursing research is an essential aspect of nursing which improves the body of knowledge. The research design, finding and tools applies in the study can be used as source for further research; the study will motivate the young and enthusiastic researchers to conduct the similar study on large scale.

The finding will help in the practice aspect to expand the role of nurse. Through nursing research nurse can update their knowledge time to time.

CONCLUSION

It was found that all the participants were very interested to learn and actively participated.

The pre-test revealed they had inadequate level of knowledge about 83.3%.

The post- test results show that they had significant gain in level of knowledge about 73.3%.

The result of positive response to the structured teaching programme indicates that it was significantly useful to them to enhance their knowledge.

RECOMMENDATION

In view of the finding and limitation of the present study following recommendation are there for further research.

1. The study can be done on large scale sample to strengthen the finding
2. The study can be conducted in different setting such as hospital.
3. A comparative study can be done regarding prevention of UTI between student of private and government school, college etc.

LIMITATION

The limitation of the study were-

1. The study limited to the student of GNM 1% year, integral institute of nursing science and research, Lucknow.

2. The study only for student who were present at the time of data collection.

DELIMITATION

1. The study is only for GNM 1» year student of integral institute of nursing science and research, Lucknow.

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