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IP Journal of Nutrition, Metabolism and Health Science

Journal homepage: https://www.jnmhs.com/

Original Research Article

A pre-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of urinary tract infection among B.Sc. nursing 1 year students of Vivekananda College of Nursing, Lucknow

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ARTICLE INFO

Article history:
Received 01-03-2023
Accepted 31-03-2023
Available online 09-05-2023

Keywords:
Urinary tract infection
Structured teaching programme
Research approach
Microorganisms

ABSTRACT

Statement of the Problem: A Pre Experimental Study To Assess The Effectiveness Of Structured Teaching Programme on knowledge Regarding Prevention Of Urinary Tract Infection Among B.Sc. Nursing 1' Year Students Of Vivekananda College Of Nursing, Lucknow."

Background: Urinary tract infections are the most frequent bacterial infection in women. It occurs four times more frequently in females than males. It is a bacterial infection that affects part of the urinary tract. It is caused by micro-organisms such as E. coli, Staphylococcus aureus, Klebsiella pneumonia etc. It occurs in the urinary tract that comprises the urethra, bladder, ureters and kidneys.

Objectives: The main objective was to assess the effectiveness of structured teaching programme on knowledge regarding prevention of urinary tract infection among B.Sc. Nursing I'year students of Vivekananda college of nursing. Lucknow.

Materials and Methods: A quantitative evaluative research approach, pre experimental one group pre-test and post-testresearch design was used.

The Sample Size: was 48 students of B.Sc. Nursing 1' year were selected using purposive sampling technique. Initially the researcher got permission from concerned authority of Vivekananda college of nursing. The written consent was obtained from samples.

The Tool Used Were: Performa of demographic variable, self-structured knowledge questionnaire. Assessment of pre-existing level of knowledge done by administering knowledge questionnaire after that on same day structured teaching program on knowledge regarding prevention of urinary tract infection was given. After 5 days post test was conducted by the investigator.

Result: The result of the study revealed that there was a significant difference between the mean pre-test (11.90) and post-test (21.54) knowledge scores, it denotes that increased knowledge after intervention.

Conclusion: The study concluded that the structured teaching programme was effective and enhancing knowledge of B.Sc. Nursing I' year students regarding prevention of urinary tract infection and that was more effective and beneficial for them.

1. Introduction

Urinary tract infection is a global health issue and is a leading cause of illness among peoples internationally. In India UTl is most common in females, half of all women experience at least one time UTI by the age of 35, and approximately 20% of women between the age of 18 and about 24have a UTI annually. Urinary tract infection is common reason for health care visit. In the united states, Urinary tract infection result in an estimated 7 million office visit, 1 million emergency department visit and over l

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https://doi.org/10.18231/j.ijnmhs.2023.008

lakh hospitalizations with an associated annual cost of S1.6 million.[1]

The incidence of UTI hospitalizations is highly seasonal and our seasonality findings are reported. Urinary tract infections peak in the summer months and the nadir occurs during the winter. The incidence of admissions for UTls exhibits a stronger seasonal effect for women than for men. Seasonality is most pronounced among younger patients, and it diminishes with advancing age. Among women, for each year of age there was a decrease of 2.6% of a standard deviation in the range of the seasonal intensity. Among men, for cache year of age there was a decrease of 1.0% of a standard deviation. During our study period, the seasonal intensity changed.[2]

Among women, the seasonality increased: the incidence of UTIs for women at the beginning of our sample was less seasonal than at the end. In contrast, among men, the personality diminished. Specifically, with each passing year between 1998 and 2011, the average seasonal intensity increased by 3.0% of a standard deviation in women and decreased by 4.5% of a standard deviation in men.[3]

As per WHO, it is estimated that one billion women around the world suffer from non-sexually transmitted urogenital infections, including bacterial vaginitis, yeast vaginitis and urinary tract infection (UTD. In India the adolescents constitute about one fifth (1/5") of the population. Therefore, it can be considered one huge segment of the total population. Urinary tract infection is highly prevalent among adolescents with 3-5% of incident rate. The male and female sex ratio in occurrence is 1:50 which is as equal as young adults. The second leading cause of morbidity is urinary tract infection, which accounts for about 8.3 million doctor visits in a year. One woman in five develops urinary tract infection during her life time.[4]

A cross-sectional study was carried out among 181 adolescent and pre-adolescent girls structured interview based questioaire was used which contained. questions related to puberty, hygiene and Urinary Tract Infection. The study result revealed that there was a 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 (C1=95%, p<0.001) and use of sanitary pads during menses (CI-95%, p<0.001). Among the total population studies the prevalence of Urinary Tract Infection among the adolescent girls was 12.7% that is 23 girls. Prevalence of urinary tract infection was found to be more (9.9%) in girls who attained menarche than those who had not (2.8%). Girls practicing improper perineal washing technique suffered more (8.3%) from urinary tract infection than those associations who did not (4.4%). The researcher concluded that by educating preventive method of UTI among adolescent girls, the incidence rate and complication can be reduced.[5]

A study conducted on UTI to estimate the annual incidence, cumulative probability of presumed urinary tract infection by age. About 10.8 % of women aged 18 reported at least one presumed UTI during the past 12 months. Majority of the cases occur among women with a history of two or more UTI episodes in their life. Overall, an estimated 11.3 million women had at least one presumed UTI treated with antibiotics. The researcher concluded that the adequate awareness on UTI were developed that would prevent either initial or recurrent UT. The net benefits to society would be substantial even at a developmental cost.[6]

2. Statement of the Problem

"A Pre-Experimental Study To assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Prevention Of Urinary Tract Infection Among B.Sc. Nursing 1st Year Students of vivekananda College of Nursing Lucknow.

3. Objectives

1. To assess the knowledge regarding prevention of urinary tract infection among B.Sc. Nursing 1 year students.
2. To evaluate the effectiveness of structured teaching program on knowledge regarding prevention of urinary tract infection.
3. To find out the association between knowledge regarding urinary Tract infection with their selected demographic variables.

3.1. Operational definition

1. *Asses-* It is the method of estimating the level of knowledge among B.Sc. Nursing 1* year students regarding prevention of urinary tract infection.
2. *Effectiveness-* Effectiveness refers to the extent to which the structured Teaching programme is helpful in gaining the knowledge regarding prevention of urinary tractinfection.
3. *Structured teaching programme-* It is planned and purposeful teaching programme which can be given to students of B.Sc. Nursing l' year regarding prevention of urinary tract infection.
4. *Knowledge-* Knowledge refers to awareness of B.Sc. Nursing 1l'l year regarding the prevention of urinary tract infection.
5. *Urinary tract infection-* It is the most common bacterial infection caused by Escherichia Coli and is primarily seen in women.
6. *Hypothesis"* A hypothesis is an assumption statement about the relationship between two or more variables that suggest an answer o the research question'
7. *Ho1:* The mean pre-test knowledge scores will not be significantly higher than the mean pre-test knowledge

score

8. *H1:* The mean pre-test knowledge scores will be significantly higher than the mean pre-test knowledge scores.
9. *Ho2:* There will be no association between pre-test knowledge scores with their selected demographic variables.
10. *H2:* There will be a significant association between pre-test knowledge scores with their selected demographic variables.

3.2. Assumptions

The study assumes that-

1. The B.Sc. Nursing 1t year students will have knowledge about certain aspects of prevention of urinary tract infection.
2. They would be willing to express their free and frank responses regarding prevention of urinary tract infection.
3. The responses to questionnaire will reflect their altered knowledge regarding prevention of urinary tract infection.
4. Structured teaching programme will enhance their knowledge regarding prevention of urinary tract infection.

3.3. Delimitations

The study is delimited to:

1. Student of B.Sc. Nursing 1 year in Vivekananda College of Nursing.
2. The students of B.Sc. Nursing 1 st year who are present in the college at the time of data collection.
3. Assessment of knowledge only once before and once after administration of the structured teaching programme through the Witten responses obtained through a structured knowledge questionnaire.

4. Review of Literature

To know the road ahead, ask those coming back. Chinese proverb Hooton TM et.al (1996) conducted a prospective study on risk factors of symptomatic urinary tract infection in young women. Researcher selected sexually active young women who were starting a new method of contraception at a university of Washington school of medicine, USA. Researchers selected 796 women. Data was collected by using daily diaries and serial interviews. The result of the study was in mean age 29,448 women were affected. The risk of acute infection was associated with a history of recurrent infection (relative risk, 5.58 in the university group and 2.10 in the HMO group) but not with cervical cap use or delayed post-coital voiding. The study concluded that among sexually active young women the incidence of urinary tract infection is higher, and the risk is strongly associated with recent sexual intercourse.[7]

GharbiMyriam et.al (2019) conducted a Retrospective population based cohort study to evaluate the association between antibiotic treatment for urinary tract infection and severe adverse outcomes in elderly patients in primary care. Data collected by clinical research data link primary care records linked to hospital episodes' statistics and death records in England.[8]

Researchers selected157264 adults aged 65 years or older presenting to a general practitioner with at least one diagnosis of suspected or confirmed lower UTI. The result of the study shows that among 312896 UT episodes (157-264 unique patients), 7.2% (n=22 534) did not have a record of antibiotics being prescribed and 6.2% (n=19 292) showed a delay in antibiotic prescribing. 1539 episodes of bloodstream infection (0.5%) were recorded within 60 days after the initial UTI. The risk of al-cause mortality was significantly higher with deferred antibiotics. Men older than 85 vicars were particularly at risk for both blood stream infection and 60 days all called GharbiMyriam et.al (2019) conducted a Retrospective population based cohort study to evaluate the association between antibiotic treatment for urinary tract infection and severe adverse outcomes in elderly patients in primary care. Data collected by clinical research data link primary care records linked to hospital episodes' statistics and death records in England.[9]

Tamegnon Victorien Dougnon (2016) conducted a cross-sectional study on Catheter-Associated Urinary Tract Infections at a Hospital in Zinvie, Benin (West Africa). Researcher selected 60 inpatients from the Services of Emergencies, Medicine and Surgery of the hospital. Urine was collected twice per patient: 10 minutes and 48 hours after the insertion of the catheter. The result of the study shows that Two days later, (48 hours after the catheterization), 14 patients out of 60 (23.33%) presented with a urinary infection, of which I patient (1.66%) was already infected before the process. Gram-negative bacteria were the most isolated bacteria (79%) With Escherichia coli as the most identified species(63%)followed by Pseudomonas spp. (11%) and Acinetobacter spp. (5%). Gram-positive cocci isolates were essentially Staphylococcus aureus (21%). The study concluded that Only a few number of health workers do respect hygiene rules before and after catheterization. Therefore, it is necessary to train health workers involved in such activities on good hygiene practices during catheterization,[10]

5. Research Methodology

"If you can't describe what you are doing as a process, you don't known what you are doing.""- W. Edwards Deming

Research methodology involves systematic procedures which the researcher starts from initial identification of the problem to its final conclusion. The role of methodology consists of procedures and techniques for conducting a study. For every piece of research work the methodology of investigation is of vital importance. The success of any research depends upon the suitability of method.[11]

5.1. Research approach

The research approach used for this study was Quantitative Research Approach, since the purpose of the study was to find out the effectiveness of Structured Teaching Programme on knowledge regarding prevention of urinary tract infection among B.Sc. Nursing 1st' year students of Vivekananda College of Nursing. Lucknow.

5.2. Research design

"Research design is the overall plan for addressing a research question, including specifications for enhancing the study's integrity,"

Pre-experimental (One group pre-test, post-test)- It is the simplest form of research design. A single case is observed at two time point, one before the treatment and one after the treatment. Changes in the outcome of interest are presumed to be the result of the intervention of treatment.

5.3. Variables

Variables are concepts at different level of abstraction that are concisely defined to promote their measurement or manipulation within study.

5.4. Dependent variables

" The outcome or response due to the effect of the independent variables, which researchers want to predict or explain."Knowledge level of B.Sc. Nursing l" year students regarding prevention of urinary tract infection."

5.5. Independent variables

" Stimulus or activity that is manipulated or varied by the researcher to create the effect on the dependent variables." "Structured Teaching Programme" 'on prevention of urinary tract infection.

5.6. Demographic variables

The characteristics and attributes of the study subjects are considered as demographic variables." Age in years, educational qualification, and family monthly income, previous knowledge regarding urinary tract infection, any previous history of urinary tract infection, and any family member affected with urinary tract infection.

5.7. Setting

"Setting is physical location and condition in which data collection takes place in a study." The study was conducted in Vivekananda College of Nursing. Lucknow.

5.8. Population

"A population is the entire aggregation of cases in which researcher is interested." The population of study was B.Sc. Nursing I' year students of Vivekananda College of NursingLucknow.

5.9. Sampling criteria

5.9.1. Sample

"A sample is a small portion of population selected for observation and analysis."

Sample of this study was B.Sc. Nursing I'year students who were studying in Vivekananda College of Nursing, Lucknow.

5.9.2. Sampling technique

"Sampling is the process of selecting a portion of the population to represent the entire population." Non probability Purposive sampling technique was used to select the sample.

5.9.3. Sample size

"Sample size means number of subjects, events, behaviours or situation that is examined in the study." The sample size of the study constitutes 48 students (n=48) who fulfilled the criteria of research and were studying in Vivekananda college of nursing, Lucknow

6. Criteria for Sampling Selection

The sample for the study was selected based on the following criteria:

6.1. Inclusion criteria

"Inclusion criteria are characteristics that the subjects must have if they are to be included in the study." In the present study inclusive criteria are-

1. Nursing students who were studying in B.Sc. Nursing I' year in Vivekananda College of Nursing, Lucknow.
2. Nursing students who were in the age group of 17-23 years.
3. Nursing students who were willing to participate in the study.

6.2. Exclusion criteria

"Exclusion criteria are those characteristics that disqualify subjects from inclusion in the study."

In the present study exclusive criteria were-

1. Nursing students who were not willing to participate in the study.
2. Nursing students who were not present at the time of data colection.
3. Nursing students other than B.Sc. Nursing 1' year.

6.3. Research tool

Tool developed for the study consisted of a structured knowledge questionnaire. It was formulated on the basis of the review of literature, opinion of experts from different fields.

6.4. Steps in the construction of the tool

The following steps are followed by the investigator to construct the tool-

1. Literature was reviewed in preparation of the tool.
2. Guidance and suggestion was taken from the experts.
3. Consultation was obtained from statistician.

6.5. Description of the tool

The most important aspect of any investigation is the lotion of appropriate information which provides necessary data to answer the question raised in the study. For this study structure knowledge questionnaire was prepared for the data collection. Following steps were taken to develop the tool: review of literature, opinion and Suggestion from guide and experts as well as investigators on experience.

6.6. Blue print of structured knowledge questionnaire

After extensive review of literature and opinion of experts, the following areas of the Blue print of Structured Knowledge Questionnaire.

After extensive review of literature and opinion of experts, the following areas of the contents were identified:

1. Knowledge regarding anatomy and physiology of urinary system.
2. Knowledge regarding prevention urinary tract infection.
3. Knowledge regarding prevention and management of urinary tract infection.

6.7. In this study the tool consists of 2 section

1. *Section:* Demographic Variables.
2. *Section:* Structured Knowledge Questionnaire.
3. *Section:* Structured knowledge questionnaire.

Based upon the three content areas in the blueprint, the structured knowledge questionnaire was prepared. It

Table 1:

Content	**Knowledge**	**Comprehension**	**Application**	**Total No: Of Question**	**Total %**
Unit-I Knowledge regarding anatomy and physiology of Urinary system	Part B-4,5	Part B-6,7		04	13.33%
Unit-II Knowledge regarding Urinary tract infection	Part B-1,2,3,8,10,11,1 2,17,18,19,21	Part B-9,13,14,15,16,20		17	56.66%
Unit-III Knowledge regarding prevention and management of Urinary tract infection	Part B- 22,28,29	Part B- 24,25,26,27,30	Part B- 23	09	30%
Total No Of Question	16	13	01	30	100%
Total (%)	50%	43.3%	3.33%	100%	100%

comprises of 2 sections. Section- A.Contains 6 items on demographic data of the subjects. The items on knowledge were placed in section B. Part B Contains 30 items which are of multiple choice answer type items. The items are based on knowledge, comprehension, and application domains as soon in the blueprint of the structured knowledge questionnaire in Table- 4.1. Each correct. response in section B scores "1' while wrong responses score 0. The scoring key for evaluating the responses is provided in the appendix- The maximum scores of the questionnaire is '30' and minimum scores is.

6.8. Score interpretation

Knowledge item score 1' was awarded for each correct answer and 0 for wrong answer in all items. Thus, a total of 30 scores were allotted under knowledge aspect and to interpret the level of knowledge, score was distributed as follows: -

Table 2:

S.no	Level of Knowledge	Score level	Score percentage
1	Inadequate	0-10	Below 50%
2	Moderates	10-20	51-74%
3	Adequate	20-30	>75%

Maximum score: 30

7. Development of Structured Teaching Programme

The Structured Teaching Programme was prepared based on the title of the topic and objective selected for the study.

The following steps were adapted to develop the Structured Teaching Programme:

1. Development of the content,
2. Preparation of the Structured Teaching Programme.
3. Content validity of Structured Teaching Programme.
4. Administration of Structured Teaching Programme.

7.1. Planning for teaching

Structured Teaching Programme was selected as an appropriate method of teaching the students of B.Sc. Nursing I' year. It helps to exchange wider area of knowledge in an easy way.

7.2. Selection and preparation of audio visual aids

Structured Teaching Programme regarding prevention of urinary tract infection was prepared according to general set standards and principles of A.V. aids preparations. The investigator selected Power Point Presentation, charts, flash cards. pamphlet as a method of teaching regarding prevention of urinary tract infection.

8. Description of Structured Teaching Programme

A structured teaching programme was developed on the basis the review of the existing literature on prevention of urinary tract infection. Guidance from experts was taken in the development of structured teaching programme. The structured teaching programme comprises of following conditions:

1. Introduction
2. Definition
3. Anatomy and physiology of urinary system
4. Classification of urinary tract infection
5. Causes and risk factors
6. Pathophysiology
7. Clinical manifestation
8. 8. Diagnostic evaluation
9. Prevention
10. Management

Structured teaching programme was given to nine experts, along with the tool for content validity. The suggestions of the experts have been incorporated in the structured teaching programme.

8.1. Content validity of the tool

"It is concerned with the scope of coverage of the content area to be measured?

The constructed tool along with objectives and criterion checklist was submitted to nine experts. The selection of experts was done based on their experience and clinical expertise. The experts were requested to give their opinions regarding relevancy, accuracy and appropriateness of the items. Experts were selected from the field of nursing and medical sciences. The suggestions from them were incorporated into the tool for final study.

9. Ethical Clearance

1. Written permission was taken from research committee of Vivekananda college of Nursing.
2. Informed consent was obtained from the participants who were enrolled for the study.

10. Data Collection Procedure

Written permission was taken from the research and ethical committee of Vivekananda College of Nursing, Lucknow. Data was collected from 17-06-19 to 21-06-19. Sample subjects were explained about the purpose of the study and confidentiality of their response was assured. On the day 1, the pre-test knowledge was given. Structured Teaching Programme was administered to the group on the same day. Post test for knowledge was carried out on the day 5 by using the same structured knowledge questionnaire. The

details of the data collection are recorded in the master data sheet.

10.1. Data management and interpretation

Data analysis is a system tic organization and synthesis of the research data and testing of research hypothesis. The data collected from the subjects was organized and tabulated. The data were analysed in terns of objectives of the study by using descriptive and inferential statistical measure, which are necessary to provide substantial summary of results.

10.2. The data analysis was planned based on the objectives of the study

1. Frequency and percentage distribution was used to analyse the demographic variables and knowledge level of the students.
2. Mean, mean percentage and standard deviation was used to assess the knowledge of B.S.Ec. Nursing l' year students regarding prevention of urinary tract infection.
3. The paired 1r-test was used to test the effectiveness of Structured Teaching Programme.

11. Data Analysis and Interpretation Results

Kerlinger (1976) has defined analysis as "categorizing ordering, manipulating and summarizing of data to obtain answers to research hypothesis questions". Analysis and interpretation is the process in which investigator examine the result from the data analysis, form conclusion explore the significance of finding generalize the finding and suggest studies. The chapter deals with the analysis and interpretation of data collected to assess the effectiveness of structured teaching program on knowledge regarding prevention of urinary tract infection among students of B.Sc. Nursing 1'year of Vivekananda College of Nursing, Lucknow.

12. Objectives

1. To assess the knowledge regarding prevention of urinary tract infection among B.Sc. Nursing 1st year students.
2. To evaluate the effectiveness of Structured Teaching Programme on knowledge regarding prevention of urinary tract infection.
3. To find out the association between knowledge regarding urinary tract infection with their selected demographic variables.

12.1. Hypotheses

The hypotheses will be tested at the 0.05 level of the significance

1. Ho: The mean post-test knowledge scores will not be significantly higher than the mean pre-test knowledge scores.
2. H: The mean post-test knowledge scores will be significantly higher than the mean. pre-test knowledge scores.
3. Ho2: There will be no association between pre-test knowledge scores with their selected demographic variables.
4. H2: There will be significant association between pre-test knowledge score with their selected demographic variables.

12.2. Organization and presentation of data

A structured knowledge questionnaire regarding prevention of urinary tract infection was developed to determine the effectiveness of structured teaching program. A sample of 48 B.Sc. Nursing 1t year students were drawn from Vivekananda College descriptive and inferential statistics. The data has been organized under the following sections:

Section1: Distribution of sample subjects according to their demographic variables of B.Sc. Nursing l' year students of Vivekananda College of Nursing, Lucknow. Demographic variables were age in years, educational qualification, family monthly income, previous knowledge regarding urinary tract infection, any history of urinary tract infection, any family member affected with urinary tract infect

Section 2: Knowledge of B.Sc. Nursing 1' year students regarding prevention of urinary tract infection.

1. Pre-test frequency and percentage distribution of sample subjects.
2. Post- test frequency and percentage distribution of sample subjects.

Section 3: Effectiveness of Structured Teaching Program on knowledge regarding prevention of urinary tract infection.

1. Item wise effectiveness of structured teaching programme
2. Testing of hypotheses

Section 4: Association between the level of pre-test knowledge scores with their selected demographic variables.

Section-1 Distribution of sample sub. jecsts according to their demographic variables.

12.3. Testing of hypothesis

In order to determine the difference between the mean pre-test and post-test knowledge scores, the following null hypothesis was formulated

Table 3: Frequency and percentage of students according to the demographic variables. n = 48

S no.	Demographic variables		Frequency	Percentage
01	Age in years	18 year-20year	42	87.5
		21 year-23year	06	12.5
		24 year-60year	00	00
		Above 26 year	00	00
02	Educational qualification	Intermediate	44	91.66
		Graduate	04	8.33
		Post graduate	00	00
		Diploma or any certificate course	00	00
03	Family monthly income	<Rs 15000	10	20.83
		15000-20000	09	18.75
		20001-25000	07	14.58
		<Rs 25000	22	45.83
04	Previous knowledge	Books/journals	21	43.75
		Lecture/seminar	04	8.33
		Newspaper/Mass media	02	4.16
		Clinical experience	21	43.75
05	Any history of urinary tract infection	Yes	08	16.66
		I. Treatment taken	07	14.58
		ii.No treatment taken	01	2.08
06	Any family member affected with Urinary tract infection	No	40	83.33
		Yes	05	10.41
		No	43	89.58

1. Ho1: The mean post-test knowledge score will not be significantly higher than mean pre-test knowledge scores.
2. H1 The mean post-test knowledge score will be significantly higher than the mean pre-test knowledge scores.

Table 4: The data was analysed by computing ‘ t " value.

Knowledge Score	Mean and Sd	Std. Error Mean	T-Value	Df	P-Value
Pre Test	11.90+	0.540	17.847	47	<0.05
Post Test	21.54+ 3.155				

t(47)=2.011 and p<0.05S*

The data presented in the Table 4, shows that the mean post-test knowledge score of samples were 21.54 and mean pre-test knowledge scores were 11.90. The ’t’ value was computed and found to be 17.847, which is more than the tabulated value ie. 2.01 at-0.05 Level of significance. This shows that the difference between pre-test and post-test of sample subjects was a true difference and not by chance. Hence, null hypothesis Hoi rejected, thus research Hypothesis was accepted.

13. Discussion

The study revealed that B.Sc. Nursing 1* year students had low level of knowledge related to prevention of Urinary tract infection as evident from the pre-test knowledge scores. The findings of the present study also indicated that after exposure to Structured Teaching Programme on prevention of Urinary tract infection in B.SC. NURSING 1 ’Year students knowledge was increased.

These finding were found to be similar with the finding from the study by Hemavathy V(2017 feb). In pre-test knowledge of nursing students there was less knowledge 11(36.6%). After giving self-instructional module, majority of students gained adequate knowledge 26(86.7%). The comparison of mean, standard deviation of pre-test and post-test knowledge and paired t’ test value among knowledge regarding Urinary Tract Infection shows that the pre-test mean score is 6.43 and the Post-test mean score is 8.7. The obtained paired r test value is 7.827 which is statisticallv significant at P-0.001.

The finding of the present study was also similar to the Vijay Purbia (1 July2014). One group pre-test post-test expert Teaching Programme on knowledge of staff nurses regarding prevention of Urinary tract infection among patients with indwelling catheters. The mean score of post-test knowledge 27.53(71.76%) was apparently higher than the mean score of pre-test13.1(45.03%) Structured Teaching Programme was effective strategy in increasing knowledge of staff nurses.

In the present study there is no association of pre-test knowledge with their selected demographic variables in contrast the study finding of Sheela Pavithran (3July 2014) showed that knowledge was significantly associated with contributing factor of Urinary tract infection like frequency

of voiding during school hours, voiding in unclean toilet, taking bath during menstruation and cleaning genitalia during menstruation

14. Summary

This chapter gives a brief summary of the study. The present study aimed to evaluate the effectiveness of StructuredTeaching Programme on knowledge regarding prevention of urinary tract infection among B.Sc. Nursing 1' year students of Vivekananda College of Nursing. Lucknow.

The objectives of the study were-

1. To assess the knowledge regarding prevention of urinary tract infection among B.Sc. Nursing l' year students.
2. To evaluate the effectiveness of Structured Teaching Programme on knowledge regarding prevention of urinary tract infection.
3. To find out the association between knowledge regarding prevention of urinary tract infection with their selected demographic variables.

The conceptual framework of the study based on the "Ludwig vinbertalanffy' sgeneral system theory model". The major component of the model was input, throughput, output and feedback It provides the comprehensive framework for achieving the objectives of the study. In this study literature review were composed of literature related to effectiveness of Structured Teaching Programme, literature related to prevention of urinary tract infection among B.Se. Nursing 1st year. This literature information enabled the investigator to study the extent of selected problem and to develop conceptual framework, data analysis and interpretation.

The research design chosen for the study was pre-experimental (one group pre-test and post-test design). The study was under taken in Vivekananda College of Nursing.

Lucknow. The data was collected through the self-structured knowledge questionnaire tool. The sample size consists of 48 students of B.Sc. nursing I' year. The obtained data was analyzed and interpreted on the basis of the objective of the study. The collected data of summarized and tabulated by utilization descriptive and inferential statics

The following conclusions were drawn in the basis of findings of the study:-

1. Majority of sample subjects were in the age group of 18-20 years i.e.(87.5%)followed by a 2I to 23 years ic.(12.5%) (0%) were in 24 to 26 years and above 26 years respectively.
2. Majority of the sample subjects were intermediate (91 68% flowed by a graduation i e (8 33%).
3. Majority of the sample subjects i.e.83.33% are not having any previous history of urinary tract infection only 16.66% samples have history of urinary tract infection. Among 16.66% who have history of UTI 14.58% have taken the treatment while 2.08% have not taken any treatment.
4. Majority of the sample subjects i.e.89.58% have no family history of urinary tract infection and 10.41% have the family history of urinary tract infection.

15. Source of Funding

None.

16. Conflict of Interest

None.

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Cite this article: Muthukumaran A. A pre-experimental study to assess the effectiveness of structured teaching programme on knowledge regarding prevention of urinary tract infection among B.Sc. nursing 1 year students of Vivekananda College of Nursing, Lucknow. *IP J Nutr Metab Health Sci* 2023;6(1):53-62.