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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/17942

DOI URL: <http://dx.doi.org/10.21474/IJAR01/17942>



RESEARCH ARTICLE

'A STUDY TO ASSESS THE EFFECTIVENESS OF VIDEO ASSISTED TEACHING (VAT) ON PREVENTION OF HYPERTHYROIDISM AND ITS ASSOCIATED FACTORS AMONG THE STUDENTS OF SECOND YEAR GNM AT A SELECTED SCHOOL OF NURSING, BENGALURU', KARNATAKA, BY THE STUDENTS OF SMT. NAGARATHNAMMA COLLEGE OF NURSING

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Manuscript Info

Manuscript History

Received: 25 September 2023

Final Accepted: 29 October 2023

Published: November 2023

Key words:-

Hyperthyroidism, Nursing Students,
Video Assisted Teaching Programme

Abstract

Background: "HEALTH IS NOT VALUED TILL SICKNESS COMES".

Hyperthyroidism occurs when the thyroid gland makes too much of thyroid hormone. This condition also is called objective thyroid. Hypothyroidism speeds up the body's metabolism. It causes many symptoms such as a weight loss, hand tremors and rapid or irregular heartbeat. A 2018 study explain that genetic factors can make many thyroid issues including hyperthyroidism. There is good scientific evidence that hyperthyroidism has important genetic component in many cases because an individual has a mutation in one and more genes. These mutations alter typically thyroid function, causing it to procedure to much T4 and T3. It is not exactly Clear why these genetic mutation as Ise. A 2021 study lists some genes that may play a role in hyperthyroidism. These include: -HCA, CTLA4, FCRL3, RNASET2, TSHR. Study notes that genetic factors might account 79% of an individual predisposition to develop gravis disease. Prevalence of hyperthyroidism is 0.8% in Europe and 1.3% in USA. Hyperthyroidism has been also studied in Cochin, India, subclinical and over hyperthyroidism were present in 1.6% and 1.3% of subject participating in community survey. Hyperthyroidism increases with age and is more frequent in women. The prevalence of hyperthyroidism seems slightly more frequent in white people than in other rules. The medicine of mild hyperthyroidism is also reported to be binges in iodine - deficient areas than in iodine sufficient areas. Hyperthyroidism is very common disease condition nowadays, so we have chosen our sample as second year GNM because, as they are already studying it so to assess their knowledge and to provide more knowledge about hyperthyroidism to give proper information and treatment about hyperthyroidism. Prevention can be done by getting your hormone levels checked all through pregnancy and 6 months after giving birth, keeping diabetes under control, check your vitamin B12 levels. People with previous

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anemia are at high risk, check for thyroid levels regularly if your family history has it.

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Introduction:-

Don't mind the scattered thoughts, blank stares, or the pharmacy in my purse. I'm a THYROID DISEASE warrior."

Hyperthyroidism is a set of disorders that involve excess synthesis and secretion of thyroid hormones (T3 and T4) by the thyroid gland, which leads to the hyper metabolic condition of thyrotoxicosis. Thyroid gland lies in the front of your neck in a position just below your Adam's apple. It is made up of two lobes (left and right), which are connected by a central isthmus. This produces a butterfly-shape appearance. Weight: 25-30gm average. It is slightly heavier in women. Thyroidectomy for hyperthyroidism was performed and antithyroid drugs and radioiodine therapy were developed in the early 1940. Thomas curing first described hypothyroidism (myxoedema) in 1850. The first person to describe the features of hyperthyroidism (later known as graves' disease) was called Hiller Parry (1775-1823) in 1786. He was a highly esteemed practitioner at birth, England. Pray has five cases of exophthalmic goitre palpation and anxiety. In India Ayurvedic medicine which originated in the 1400BC, goitre was called galaganda. It classified thyroid disease into three types: - Vatasa (hyperthyroidism) Kaphasa (hyperthyroidism) and medasa (thyroid cyst).

The overall prevalence of HT in adults was 7.5%, with a prevalence of 17.5% in women and 6.0% in men. The risk of developing HT in adult women is approximately 4 times than that of adult man. The prevalence of self-reported goitre or thyroid disorder in national family health survey IV [NFHS IV (2015-2016) was 2.2% while it was 2.9% in NFHS -V (2019-2021)]

The causes of hyperthyroidism are mainly categorised into: -

Primary hyperthyroidism:

Graves' disease, Toxic adenoma toxic multinodular goitre or Plummer's disease, functioning thyroid carcinoma metastases, activating mutation of the TSH receptor, Activating mutation of GSX, Struma ovaries, Drugs: iodine excess (Job - Base Dow Phenomenon)

Secondary hyperthyroidism:

TSH secreting pituitary adenoma, Thyroid hormone resistance syndrome, Chronic gonadotropin - secreting tumours, Gestational thyrotoxicosis.

Objective:-

- 1) To assess the level of knowledge on Hyperthyroidism.
- 2) To assess the effectiveness of video assisted teaching on prevention of Hyperthyroidism
- 3) To find the association between the post-test knowledge score with selected demographic variables

Methods:-

This chapter deals with the description of research methodology. It is most important in research as it is the framework in conducting study. It indicates general pattern for organizing the procedure together valid and reliable data for investigations. It includes research designs, population and sample, sampling technique, inclusion and exclusion criteria, instruments, data collection and methods of data collection procedure and data analysis plan.

VAT video assisted teaching programme –

It is a teaching method by representing PPT slideshow that promotes an understanding of schedules, activities and expectations.

Research Design:

Pre-experimental, one group pre-test and post-test design.

Variables under the study:

Attributed variable is a variable where we do not alter the variable during the study.

Independent variable:

Video assisted teaching programme on prevention of Hyperthyroidism.

Dependent variable:

Knowledge about hyperthyroidism among students of second year GNM.

Attributed variable:

Age, gender, religion.

Setting of the study:

Bengaluru -560107, The study was conducted at Smt. Nagarathamma school of Nursing, Soldevanahalli.

Population-

Population of the study consists of students of second year GNM of Smt. Nagarathamma school of Nursing.

Sampling And Sampling Technique

Sampling size-

60 samples have been selected from second year GNM, Smt. Nagarathamma school of Nursing, Soldevanahalli. Bengaluru.

Sampling technique-

Convenient sampling technique has been selected for the present study.

Sampling Criteria-

Inclusion criteria-

Students who are in second GNM.
Students who are available at the time of study.
Students who are willing to participate in study.

Exclusion criteria

Students who are on leave at the time of data collection.
Students who are not willing to participate in the study.
Students who are other than the second year GNM.

Selection And Development Of The Tool

The tool was developed on the basis of objectives of the study, Structured knowledge questionnaire was constructed for the study to evaluate the effectiveness of planned teaching programme on prevention of hyperthyroidism among the students of second year GNM.

The steps followed in the preparation tools were:

- Review of literature
- Discussion with the guide
- Previous researches from the library and internet

Description of Tool

After the extensive review of literature and discussion with the experts, structured knowledge Questionnaire was prepared to evaluate the knowledge regarding hyperthyroidism.

Preparation Of Closed Ended Questionnaire

Closed ended questionnaire were prepared to assess the effectiveness of video assisted teaching programme on knowledge, regarding prevention of hyperthyroidism among students of second year GNM.

Section 1: The Socio Demographic Variables:

The socio demographic contains of 4 items. Pertaining to age, gender, religion, previous knowledge related to hyperthyroidism.

Section 2:

This section deals with the structured knowledge questionnaire regarding hyperthyroidism. It consists of 20 questions related to general information regarding hypothyroidism, questionnaire related to hyperthyroidism and questions related to prevention and complication of hyperthyroidism. It consists of multiple-choice questions on knowledge regarding hypothyroidism on second year GNM student. The questions should be answered based on selecting an answer option, which means the students have to click either yes or no and choosing the correct option.

Scoring Technique

Every correct answer was awarded a score of 1 and every incorrect answer awarded 0. The maximum score on structured knowledge questionnaire was 20. The different levels of knowledge are categorized as follows:

Sl.no	Level of knowledge	Percentage of score	Actual score
1	Inadequate	< 50%	0-5
2	Moderate	50 -75%	6-10
3	Adequate	>75%	10-20

Content Validity of the Tool:

The content was validated by an expert in the field. Modification of items such as arrangement of the questionnaire and increasing the number of questions were done. Based on the expert's suggestion, the tool got its final form.

Preparation of the video assisted teaching programme: The act was prepared to assess the effectiveness of the video assisted teaching programme on knowledge regarding hyperthyroidism among second year GNM student.

Data Collection Procedure:**Permission from the concerned authority**

Formal permission was obtained from the concerned authority to conduct the study.

Period of data collection

Data collection was done for a period of one day on Saturday 23 /06/2023

Planned data analysis:

The data collected was organized, tabulated and analysed by using descriptive and inferential statistics (mean, standard deviation and paired test).

Results:-

Organization of Analysed Data: The data was organized and presented in the form of tables and diagrams under the following headings:

Section A:

Frequency and percentage distribution of socio demographic variables.

Section B:

- 1) Mean pre-test level of knowledge and practice.
- 2) Mean post-test level of knowledge and practice.

Section C:

- 1) Comparison of mean pre-test and mean post-test level of knowledge.

Table 1:- Frequency and percentage distribution of socio-demographic variables.

Gender	Frequency	Percentage
Male	16	27%
Female	44	73%

Table 1 shows gender, the majority 37(51.38) were Boys, and at least 35(48.61) were Girls.

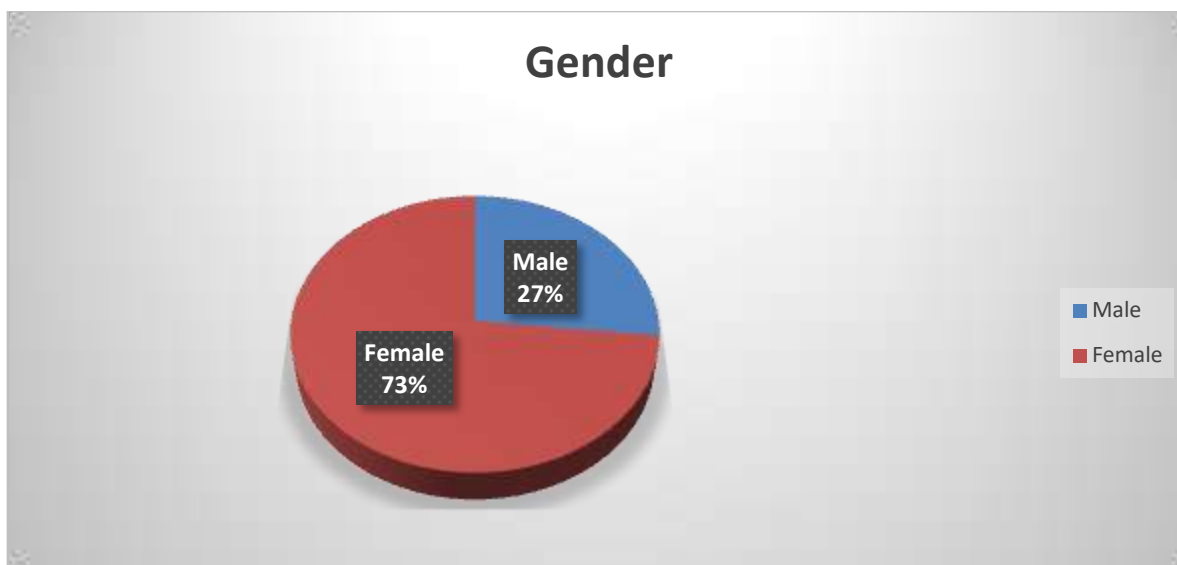


Figure 1:-

Table 2:- Frequency and percentage distribution of respondents according to the age of respondent.

Age	Frequency	Percentage
20 years	17	28%
21 years	35	58%
22 years	7	12%
23 years	1	2%

The above table shows the percentage of students according to their age.

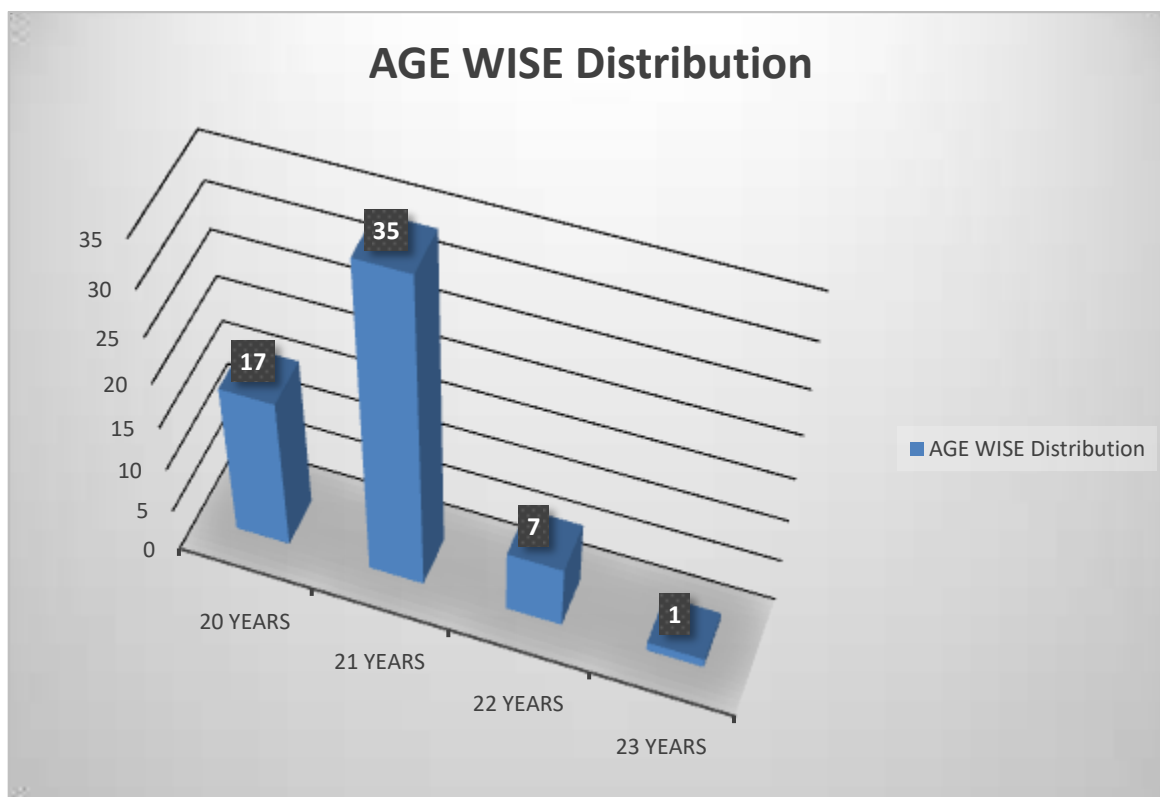


Figure 2:- Frequency and percentage distribution of respondent according to age group.

Table 3:- Frequency and percentage distribution of respondents according to the religion of respondent.

Religion	Frequency	Percentage
Islam	10	17%
Hindu	28	46%
Christian	7	12%
Buddhist	15	25%

The above table shows the percentage of students according to their religion

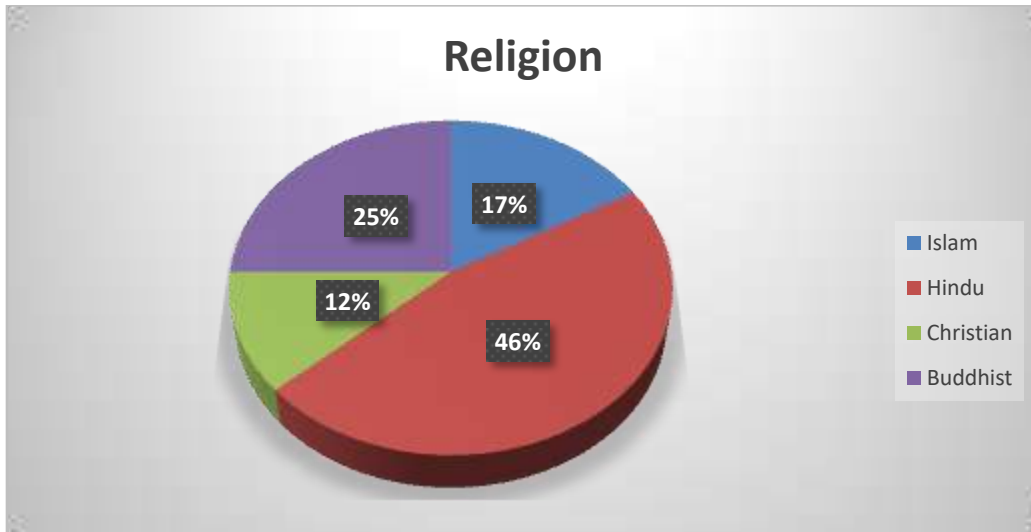


Figure 3:- Frequency and percentage distribution of respondent according to religion.

Table 4:- Frequency and percentage distribution of various levels of knowledge.

Knowledge level	Category (score)	Respondents	
		Frequency	Percentage
Inadequate	Below 50%	33	55%
Average	50-70%	16	27%
Adequate	Above 75%	11	18%

The table above shows that the majority (55%) of students have inadequate knowledge, where 27% has average knowledge and 18% have adequate knowledge on prevention of hyperthyroidism.

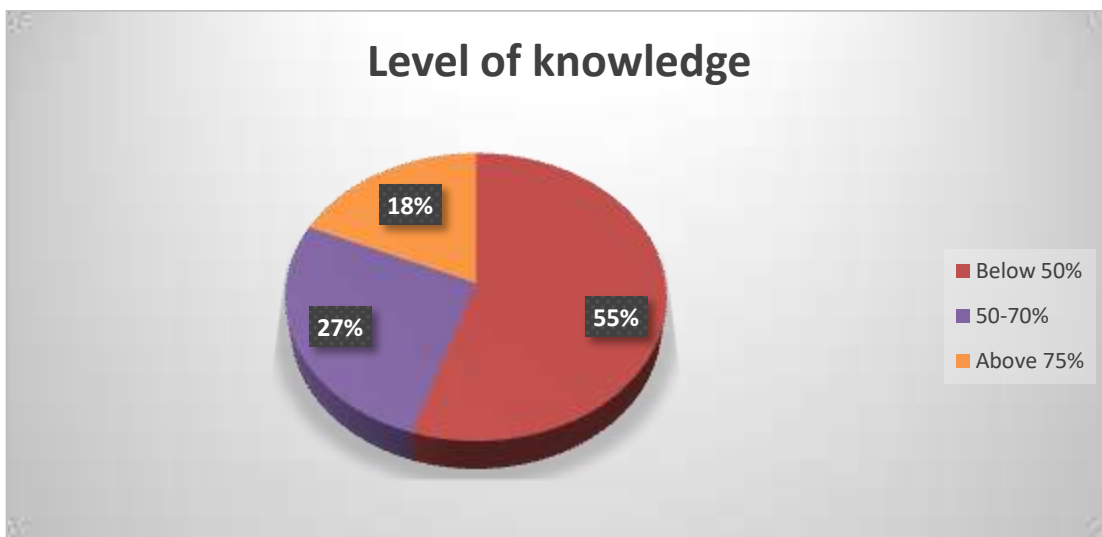


Figure 4:- The above pie chart depicts the distribution of students according to their level of knowledge.

Table 5:- Mean, median and range for pre-test knowledge regarding prevention of hyperthyroidism.

Category	Mean	Median	Range
General question	14.58	15	8-19
Hyperthyroidism			
Prevention			

The above table shows that the overall mean pre-test knowledge of GNM students in selected Smt. Nagarathamma School of Nursing are 14.58 and median 15 and range 8.19.

Table 6:- Mean, median and range for post-test knowledge regarding prevention of hyperthyroidism.

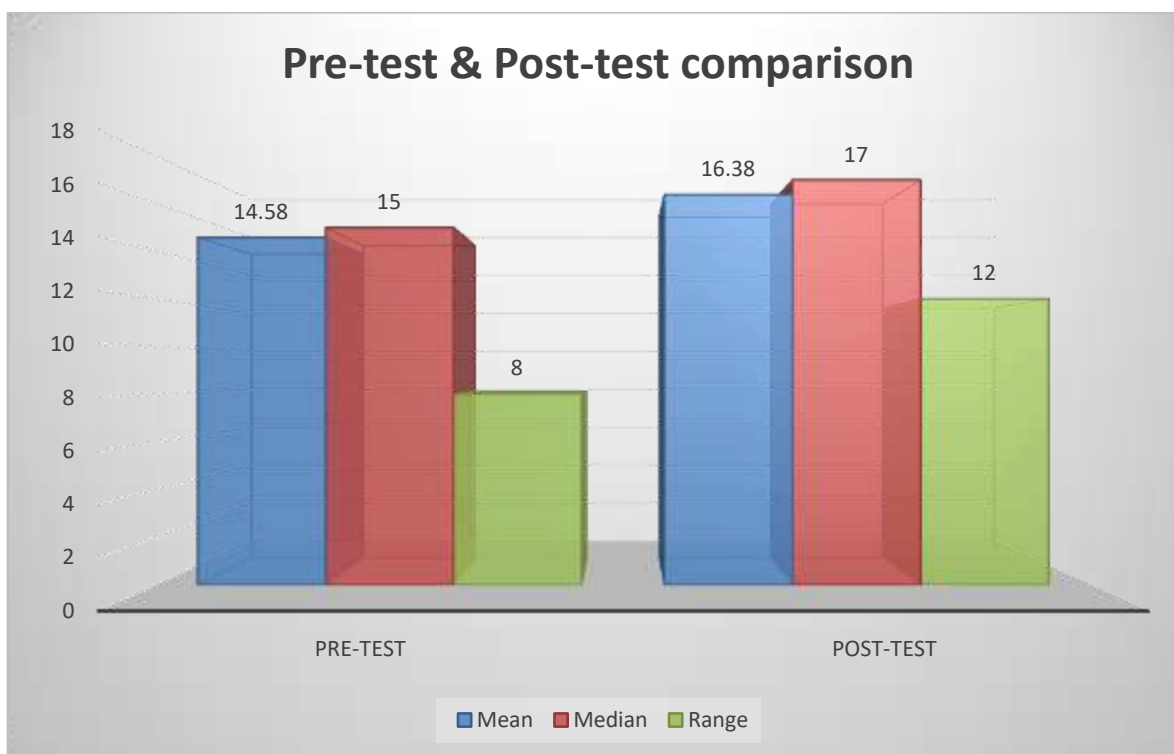
Category	Mean	Median	Range
General question	16.38	17	12-19
Hyperthyroidism			
Prevention			

The above table shows that the overall mean post-test knowledge of GNM students in selected Smt. Nagarathamma School of Nursing are 16.38 and median 17 and range 12.19.

Table 7:- Comparison between pre-test and post-test result.

Aspects Deviation	Mean	Median	Range
Pre-test	14.58	15	8-19
Post-test	16.38	17	12-19

The above table shows a comparison of pre-test and post-test mean, median and range.

**Figure 5:-** The above graph shows the comparison between pre-test and post-test mean, median and range.

Discussion:-

This chapter deals with the discussion according to the result obtained from the statistical analysis based on the data of the study, objective and hypothesis. The knowledge and practice regarding prevention of hyperthyroidism among second year GNM students. Pre experimental design with one group of pre-test/post-test was used to evaluate the effectiveness of video assisted teaching programme regarding prevention of hyperthyroidism and its associated factors among second year GNM students. A self-administered structured questionnaire was used to collect data from the subjects. Pre-test was conducted on the second year GNM students after explaining the purpose of the

study. Video assisted teaching through power point presentation was given after conducting the pre-test examination, followed by post-test examination to evaluate the effectiveness of video assisted teaching regarding prevention of hyperthyroidism.

Limitations

The study was limited to:

1. The study is limited to the students studying in 2nd year GNM.
2. The sample size is limited to 60 students who are studying in 2nd GNM.
3. Effectiveness of video assisted teaching programme was assessed in terms of knowledge scores by structured questionnaire.

Nursing Implications

Nursing Education:

As a nurse educator, there are lots of opportunities for nursing professionals to provide health education regarding hyperthyroidism, which will be helpful in reducing complication related to hyperthyroidism.

Nursing Research:

The study would help to have an insight into the development of teaching modules and relevant information and materials of hyperthyroidism. Assess the knowledge of the others regarding hyperthyroidism. A detailed study using standardized parameters suitable to the local population could be used so as to get scientific result.

Nursing Practice:

Nursing professionals working in the community setting will be able to find opportunities to teach and improve the knowledge of students regarding hyperthyroidism. Implication for practice includes video assisted teaching programme and continued education to improve knowledge regarding hyperthyroidism.

Nursing Administration:

Nursing administration may be able to take part in making health policy and developing protocols. Nursing Administrator may provide sufficient number of health workers as per recommendations of the Indian council to the community area to educate. The nursing administrators concentrates on proper selection, placement and effect utilization of health workers in all areas in educating the students regarding the hyperthyroidism.

Conclusion:-

The focus of the study is to evaluate the effectiveness of video assisted teaching programme on the knowledge regarding prevention of hyperthyroidism among second year GNM students at selected school of nursing. The data was collected using structured knowledge questionnaire. The collected data was analysed and interpreted using appropriate statistical methods.

The following conclusions were drawn from the study:

The subjects were having inadequate knowledge regarding prevention of hyperthyroidism. Video assisted teaching programme was effective in improving the knowledge among respondents. It was found that during pre-test many students were having inadequate knowledge. The mean pre-test level of knowledge was 14.58 and the median was 15 and range was 8-19. After administration of video assisted teaching programme, the level of knowledge was calculated. 76.7% of the students had moderate level of knowledge and 23.3% of students had adequate level of knowledge on prevention of hyperthyroidism. The association between demographic variables like gender, age, religion and level of knowledge was not significant.

References:-

1. Academy of Medical-Surgical Nurses (2018), Scope and Standards of Medical Surgical Nursing Practice (6th ed.). Pitman, NJ.
2. Craven, H. (2016). Core curriculum of Medical-Surgical Nursing (5th ed.). Pitman, NJ: Academy of Medical-Surgical Nurses.
3. Roberts, D. (2014). Medical-Surgical Nursing Review Questions (3 ed.). Pitman, NJ: Academy of Medical-Surgical Nurses.

4. Hinkle, J.L., & Cheever, K.H. (2018). Brunner & Siddharth's Textbook of Medical- Surgical Nursing (14 ed.). Philadelphia: Wolters Kluwer.
5. Ignatavicius, D.D., Workman, M.L., & Rebar C.R. (2018). Medical-Surgical Nursing: Concepts for Interprofessional Collaborative Care (9th ed.). St. Louis: Elsevier.
6. LeMone P., Burke, K.M., Bauldoff G., & Gubrud P. (2015). Medical-Surgical Nursing: Critical Reasoning in Patient Care (6" ed.). Upper Saddle River, NJ: Pearson/Prentice Hall.
7. Lewis, S.L., Dirksen, S.R., Heitkemper M.M. Bucher L. & Harding (2017). Medical-Surgical Nursing: Assessment and Management of Clinical Problems (10th ed.). St. Louis: Elsevier.
8. Potter, P.A., Perry, A.G. Stockert, P.A. & Hall, (2017). Fundamentals of Nursing (9th ed.). St. Louis: Elsevier.
9. Wilkinson, J.M., Treas, L.S., Barnett, K.L., & Smith, M.H. (2016), Fundamentals of Nursing: Volume 1- Theory, Concepts and Applications; (3 ed.). Philadelphia: F.A. Davis Co.
10. Wilkinson, J.M., Treas, L.S., Barnett, K.L., & Smith, M.H. (2016), Fundamentals of Nursing: Volume 2- Thinking. Doing and Caring. (3 ed.). Philadelphia: F.A. Davis Co.