Mahesh Chendake
Krishna Institute of Nursing
Sciences, Karad Krishna
Institute of Medical Sciences
Deemed To Be University,
Karad, Maharashtra, India

Sushma Shete
Krishna Institute of Nursing
Sciences, Karad Krishna
Institute of Medical Sciences
Deemed To Be University,
Karad, Maharashtra, India

A study to assess the of audio-visual learning package on knowledge regarding gastro-intestinal tract assessment among under graduate student nurses

Mahesh Chendake and Sushma Shete

Abstract
Acute abdominal conditions are time-critical illnesses that need urgent surgical care. These are common, treatable conditions in high-income countries, but they remain important causes of premature mortality in India and many low-income and middle-income countries where access to surgical care remains poor.
Objectives: To assess the knowledge of under graduate student nurses regarding GastroIntestinal Tract assessment, To find an association between pre test and post test knowledge scores regarding Gastro Intestinal Tract Assessment with selected socio demographic variables.
Material & Methods: Evaluative research approach was used. Research design- Quasi experimental (one group pre & post test design). Study was conducted on 91 under graduate student nurses of 2nd year Basic. B.Sc. Nursing. Using Non Probability Convenient sampling technique. A structured knowledge questionnaire was used to assess the pre-existing knowledge on G.I.T assessment among U.G student nurses. The data was collected using pre tested self administered questionnaire. Frequency distribution analysis was performed.
Result: The socio demographic data revealed that majority of the students 84 (92%) were in the age group of 18 – 20. The maximum number of respondents 56 (62%) were females. Majority of respondents 46 (51%) belongs to Hindu by Religion. Majority of respondents 43 (47.25%) coming from rural area. Most of the respondents 41 (45.05%) secured pass class in the first year university exam and majority of U.G student nurses 79 (87%) have not taken prior training regarding G.I.T assessment.
Conclusion: It is suggesting that there was a significant difference of 8.19 which was the result of watching learning package on G.I.T assessment. Thus it was concluded that the Audio Visual Learning Package was effective method to improve U.G student nurses knowledge regarding G.I.T assessment.

Keywords: Assessment Knowledge, Audio-Visual Learning Package (CD-ROM), Gastro Intestinal Tract assessment, Under Graduate student Nurses.

Introduction
The human gastrointestinal tract or G.I.T is an organ system responsible for consuming and digesting foodstuffs, absorbing nutrients, and expelling waste. The gastrointestinal tract consists of a hollow muscular tube starting from the oral cavity, where food enters the mouth, continuing through the pharynx, esophagus, stomach and intestines to the rectum and anus, where food is expelled. There are various accessory organs that assist the tract by secreting enzymes to help break down food into its component nutrients. Thus the salivary glands, liver, pancreas and gall bladder have important functions in the digestive system. Food is propelled along the length of the G.I.T by peristaltic movements of the muscular walls [1].

The primary purpose of the gastrointestinal tract is to break down of food into nutrients, which can be absorbed into the body to provide energy. Secondly, digestion occurs mainly in the stomach and small intestine where proteins, fats and carbohydrates are chemically broken down into their basic building blocks. Smaller molecules are then absorbed across the epithelium of the small intestine and subsequently enter the circulation. The large intestine plays a key role in reabsorbing excess water. Finally, undigested material and secreted waste products are excreted from the body by defecation [2].

Corresponding Author:
Mahesh Chendake
Krishna Institute of Nursing
Sciences, Karad Krishna
Institute of Medical Sciences
Deemed To Be University,
Karad, Maharashtra, India

Acute abdominal conditions, including peptic ulcer disease, appendicitis, and hernias are time-critical illnesses that need urgent surgical care. These are common, treatable conditions in high-income countries, but they remain important causes of premature mortality in India and many low-income and middle-income countries where access to surgical care remains poor [3].

Nurses act as primary or secondary caregivers in their role on the treatment team. Therefore their activities will vary. If the nurse assumes the primary role in conducting the G.I.T assessment, his or her actions will be different than if she or he is in a secondary role, assisting the physician. But there are many situations in which the nurse can be the one to perform the G.I.T assessment. Based on the exam results, the treatment team becomes familiar with the patient's health, discovers where the patient's health deviates from the norm, and is aided in developing a treatment plan. The orientation of the nurse is to care for the body-in a caring way, bemuse it is the temple in which God abides [6].

A study was carried out to find out Factors which influence nurse practitioners ability to carry out physical examination skills in the clinical area after a degree level. A Delphi study was undertaken using blind copy email over six weeks in 2008. The participants included a purposive sample of 21 nurses from 10 clinical areas who had completed a degree level module in physical examination as part of a nurse practitioner pathway. This study generated valuable opinion of factors that can help or hinder the ability of nurses to practice physical examination in the clinical area. The results highlight the importance of individual self-confidence, role clarity, effective educational preparation and support from other disciplines to the nurse practitioners ability to carry out this new role [7].

Material and Method
Research Approach: Evaluative approach
Research design: Quasi experimental (one group pre & post test design).
Setting of the study: Krishna Institute of Nursing Sciences Karad.
Study subjects: In the present study the sample consisted of 91 under graduate student nurses in 2nd yr B.Sc. nursing science of Krishna Institute of Nursing Sciences Karad.
Sampling Technique: Convenient Sampling Technique.

Section A: Deals with the socio – demographic data of the samples, which includes, Age, sex, Religion, Place of residence, occupation of the father and mother, Academic performance in 1st yr university exam and previous training in Gastro Intestinal Tract Assessment.

Section B: Contains multiple choice questions regarding knowledge of Gastro Intestinal Tract assessment.

Method of data collection
After all formal permission, the tool was administered to the study subjects in Krishna institute of nursing sciences karad. A time schedule was planned for collecting the data. In order to obtain response each participant was assured about the confidentiality of their response. The average time taken for each data collection was 30 to 45 minutes. The study was followed by one group pre test.

Pre test
The structured questionnaire which assess the knowledge of undergraduate students nurses regarding Gastro Intestinal Tract Assessment.

Results
The result revealed that among 91subjects, Majority of the subjects between the age group 41-50 year 16(32.6 %) age, 15 (30.6%) subjects were 31-40 years. Majority of samples 45(91.8 %) were from Hindu religion, 26(53.06.%) women's were educated up to secondary school, and 13(26.5 %) women's educated primary school. 49(100%) women's were from rural family, and 41(83.6 %)women's married. widow 8(16.3%), 47(95.9%) of their women's were housewives and 45(91.8%) women's tacking mixed diet, 46(93.8%) women's had no history of breast cancer, 2(4.08%) had history of breast cancer of mother. 40(81.6%) women's having Habit of tobacco,9 (18.3%) women's no habit of tobacco. Maximum women's from joint family i.e. 27(55.1%) were nuclear family women's 22(44.8%).

In the pre test 73.46% women's having average knowledge14.28% women's having good knowledge and in the post test 95.91% women's having good knowledge. 4.08% women's having average knowledge.

Table 1: Frequency and percentage distribution of pre-test knowledge scores regarding G.I.T Assessment

Variables	Category	Respondent	
		Frequency (f)	Percentage (%)
Age	18-20 years	84	92.31
	21-23 years	7	7.69
	24 & above	0	0.00
Sex	Male	35	38.46
	Female	56	61.54
Religion	Hindu	46	50.55
	Muslim	10	11.11
	Christian	35	38.46
	Other	0	0.00
Place of Residence	Rural	43	47.25
	Urban	26	28.57
	Semi urban	22	24.18
Occupation of Father Health Self-	Care Professional	3	3.30
	Government service	13	14.29
	Private Service	36	39.56
	employed/Business	15	16.48
	Agriculture	24	26.37
Occupation of Mother	Health Care Professional	6	6.59
	Government service House Wife 72 79.12	5	5.49
	Private Service 1 1.10 Self	1	1.10
	-employed/Business	7	7.69
	House Wife	72	79.12
Academic Performance	Distinction	0	0.00
	First Class	6	6.59
	Second Class	21	23.8
	Pass Class	41	45.05
	ATKT	23	25.27
Previous Training	Yes	12	13.19
	No	79	86.81

Table 2: Classification of under graduate student nurses on pre test knowledge score level regarding G.I.T assessment

Level of Knowledge	Score	Level of Respondents	
		Frequency	Percentage
Poor	0-10	57	62.64
Good	11-18	34	37.36
Excellent	19-25	0	0
Total		91	100

Table 2 The pre-test level of knowledge of under graduate student nurses regarding Gastro Intestinal Tract Assessment. In the table it is noticeable that majority of under graduate student nurses 57 (62.64%) had poor level of knowledge about Gastro Intestinal Tract Assessment, whereas 34 (37.36%) of under graduate student nurses had good level of knowledge and none of under graduate student nurses had excellent knowledge regarding Gastro Intestinal Tract Assessment before administration of audio visual learning package.

Table 3: Classification of under graduate student nurses on post-test knowledge score level regarding G.I.T assessment

Level of Knowledge	Score	Level of Respondents	
		Frequency	Percentage
Poor	0-10	2	2.20
Good	11-18	31	34.7
Excellent	19-25	58	63.74
Total		91	100

Table 3 the post-test level of knowledge of under graduate student nurses on Gastro Intestinal Tract Assessment, in which majority of under graduate student nurses 58 (63.74%) had excellent level of knowledge about Gastro Intestinal Tract Assessment whereas 31 (34.07%) of under graduate student nurses had good level of knowledge and only 2 (2.20%) of under graduate student nurses had poor knowledge regarding Gastro Intestinal Tract Assessment after administration of audio- visual learning package.

Discussion
Based on the above objective of the study the data was collected by the investigator during the pre-test revealed that the knowledge of under graduate student nurses on Gastro Intestinal Tract Assessment. The pre-test data revealed that, majority of under graduate student nurses 57 (62.64%) had poor level of knowledge about Gastro Intestinal Tract Assessment, whereas 34 (37.36%) of under graduate student nurses had good level of knowledge and none of under graduate student nurses had excellent knowledge regarding Gastro Intestinal Tract Assessment before administration of audio visual learning package The above findings supported by a study carried out by Mohsen AH, Azade S in 2013. A cross sectional study carried out to evaluate nurse's use and mastery in health assessment skills. The study was conducted on 200 nurses in Isfahan province hospitals. Data was collected by a questionnaire including demographic data and 120 health assessment skills. Nurses scored their frequency of using and proficiency in skills. Statistical analysis was conducted by ANOVA, Tukey test and independent sample T-tests. The result shows that highest level of using and proficiency in skills was related to taking history. Nurses received 87.25% of score in this field. The lowest level of application was in assessment of the urogenital system so that nurses received 16.37% of score in this area. Also the lowest proficiency was in assessment of the nervous system and nurses received 34.58% of score in this area. The level of nurses' proficiency in the health assessment skills was not satisfactory. Modifying the curriculum and cooperating of nurse managers and nursing schools can help to improve the situation [4].

The above findings also supported by a study carried out by Giddens JF in 2007. A survey of physical assessment of techniques performed by RNs: lessons for nursing education. The purpose of this study was to identify physical examination skills performed by practicing nurses to better understand the competencies needed by graduates of nursing programmes. A sample of 193 nurses completed a survey indicating the frequency they performed various physical assessment techniques. 30 skills routinely performed occasionally or were not performed. The fact that only 30 skills were reportedly performed regularly by the sample raises questions about the depth at which examinations should be conducted in the clinical setting and the depth at which physical examinations skills should be taught in nursing programs. Nurse educator should assess the skills currently taught in nursing programs and consider what skills graduates actually needs to enter nursing practice [5].

Conclusion
The findings of the study showed that the knowledge of students was less before the administration of the structure teaching pogramme about assement of GI tract and given awareness and knowledge All students know and improve life style, and prevent complication

Ethical Clearance
The study was approved by the Institutional Committee of Krishna Institute of Medical Sciences, Deemed to Be University Karad,

Acknowledgement
A heartfelt appreciation goes to officials of Krishna institute Medical Sciences, Deemed To Be University Karad, I would like to express our gratitude to the students II BSC. NURSING of KINS who have participated in my study I am also grateful to all who have directly and indirectly helped me in this study.

References
1. Inderbir S. anatomy and physiology for nurses. New Delhi: Jaypee brothers, 199-210.
2. Joyce MB, Jane HH. Medical Surgical Nursing; Clinical management for positive outcomes. 8th ed. Elsevier publication. 2009; 1:546-49.
3. Anna J, et al. Deaths from acute abdominal conditions and geographical access to surgical care in India; a nationally representative spatial analysis. The lancet global health. 2005; 3(10):646:53. Available from http://www.thelancet.com/journals/langlo/article/PIIS22 14-109X(15)000790/fulltext?rss=yes.
4. Mohsen A, Azade S. urses' Evaluation of Their Use and Mastery in Health Assessment Skills: Selected Iran's Hospitals. Nurs Midwifery Stud. 2013; 2(3):39-43.
5. Giddens JF. A survey of physicl assessment technique performed by RN's: lessons for nursing education. Journal of nursing education. 46(2):83-7.

6. Suzanne C, Smeltzer, Brenda G. Brunner and suddarth's textbook of medical surgical nursing. 10TH ed. LWW Publication. 2004, 34-42.
7. McElhinney E. Factors which influence nurse practitioners ability to carry out physical examination skills in the clinical area after a degree level module--an electronic Delphi study. J Clin Nurs. 2010; 19(22):3177-87.