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A Comparative Study to Assess the Knowledge Regarding Physical Examination between B.Sc Nursing and GNM Nursing Students in Selected Academy for Nursing Science, Mysore

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Abstract:

Assessment is a key component of nursing practice required for planning and provision of patient and family centered care. Failure in identifying the challenges and problems that students encountered during physical assessment both in classroom and clinical learning environment prevents them from providing patients quality care. During the physical assessment period nursing students are given an opportunity to develop a rapport with patient and their family members which make all nursing procedures easy.

Objectives:1. To assess the knowledge of BSC and GNM nursing students regarding physical examination 2.To compare the knowledge of BSC and GNM nursing students regarding physical examination.3.To find out the association between the knowledge of BSC and GNM nursing students regarding physical examination with selected demographic variables.

Methodology: A comparative survey design was adopted for the study. Samples were selected using non probability convenient sampling technique; samples consist of 160 nursingstudents, out of which 80 from BSC and 80 from GNM. Data collected from the participants by structured knowledge questionnaires on physical examination. Collected data was analyzed by using descriptive and inferential statistics.

Result: findings of the study revealed that majority 75% of BSC students and 61.3% of GNM students had moderately adequate knowledge regarding physical examination. The total difference in the mean knowledge score was 0.56 with the t value of 1.02 and found to be not significant at the level of $p>0.05$. Hence it indicated that there was no significant difference in the knowledge level of BSC and GNM nursing students. Study also reveals that there was a significant association between the knowledge score of the BSC nursing students with demographic variable religion at the probability level of $p<0.05$.

Keywords: Knowledge, Physical examination, BSCand GNM nursing students

INTRODUCTION:

Physical examination is a head to toe review of body system that offers objective information about client and allows the nurse to make clinical judgement. A good physical examination leads to identification of the client – status, strengths and concern for nursing diagnosis. This provides discretion for nursing implementation and alleviation of client concern[1]. It contains competency level that nursing students gained knowledge and skills from academic institution to the clinical settings which are an

essential part of patient's quality care[5]. A thorough physical examination can assist a clinician in refining the next action in the clinical diagnosis, avoiding unnecessary diagnostic testing, and assisting in the patient's trust building through touch. It generally consists of series of questions about patient's medical history followed by examination based on reported symptoms. Together with medical history and physical examinations help to determine a diagnosis and device the treatment plans. For a nurse comprehensive patient health assessment is an important first step in developing a plan to deliver the best patient care[2].

NEED FOR THE STUDY:

Physical examination is an integral part of nursing care and it is the key part of a nurse's role and responsibility. For a nurse physical assessment is a tool to learn about patient's concerns, symptoms and overall health, so we have to give importance to physical examination.The health assessment constitutes one of the key components in nursing skills and plays a decisive role in identifying the problems in different patient systems and the development of nursing care programs[4]. Despite the curriculum of physical examination in nursing education , research studies suggests that only 11–29% of physical assessment techniques taught in nursing schools and colleges are being employed on a routine basis by students in practice[3].. Several studies suggest time interruption, lack of knowledge and lack of confidence in head-to-toe assessment were reported barriers in conducting health assessment which affects the nurses' performance in clinical settings[5].This study was conducted among first year BSC and GNM nursing students since they are new to nursing field. The current findings may help educational and nursing experts to improve the nursing programs, by better characterizing the problem behind inadequate knowledge on physical examination and the reasons behind it[6].

OBJECTIVES

To assess the knowledge of BSC and GNM students regarding physical examination

To compare the knowledge of BSC and GNM students regarding physical examination

The find out the association between level of knowledge of BSC and GNM students regarding physical examination with selected demographic variables.

HYPOTHESIS

H1: There will be a significant difference between the knowledge of BSC and GNM students regarding physical examination.

H2: There will be a significant associations between the knowledge of BSC and GNM students regarding physical examination and selected demographic variables.

METHODOLOGY

Research design: Comparative survey design

Sampling technique: Convenience sampling technique.

Sample: sample size was 160 nursing students out of which 80 from BSC and 80 from GNM.

VARIABLES:

Study variable: knowledge regarding physical examination.

Demographic variable: age, gender, religion, mother's education, mother's occupation, type of family and place of residence.

SETTING

The present study has conducted in selectedacademy for nursing science.

DATA COLLECTION TECHNIQUE

Section A- It deals with socio demographic proformawhich include age, gender, religion, mother's education, mother's occupation, type of family and place of residence.

Section B-structured knowledge questionnaire was prepared to assess the knowledge on physical examination among BSC and GNM nursing students.

Based on the percentage gained by the Nursing Students, the knowledge of the respondent was arbitrarily categorized in the following groups.

1. Inadequate knowledge: 0-6
2. Moderately adequate knowledge: 7-13
3. Adequate knowledge: 14-20

PROCEDURE FOR DATA COLLECTION

Data was collected within the time period of 19-8-2020 to 20-8 -2020.Permission was sought from the selected academy for nursing science. The investigator explained the purpose of the study to the students, obtained their consent and structured questionnaire items were distributed to the samples along with the demographic proforma. The investigator collected the answer papers after completion and it took nearly 20-25 minutes.

Plan for Data Analysis:

Data were analyzed with the help of descriptive and inferential statistics.

Demographic variables of the students would be analyzed in terms of frequency and percentage.

Knowledge score of both groups divided as inadequate, moderately adequate, and adequate in terms of frequency and percentage.

Comparison of the knowledge level of BSC and GNM students by applying independent t test

Independent t test and one way ANOVA used to find the association between knowledge scores with selected demographic variables. The significant findings are expressed in form of tables and figures.

SECTION: 1

Description of demographic variables under study.

TABLE: 1 Frequency and percentage distribution of BSC and GNM nursing students according to demographic variables. N= 160

SL.NO	Demographic variables	BSC		GNM	
		Frequency	Percentage	Frequency	Percentage
1	Age				
	a) 18-19	54	67.5%	59	73.7%
	b) 20-21	26	32.5%	21	26.3%
2	Gender				
	a) Male	7	8.8%		
	b) Female	73	91.2%	11	13.8%
				69	86.2%
3	Religion of family				
	a) Hindu	16	20%		
	b) Christian	62	77.5%	46	57.5%
	c) Muslim	2	2.5%	31	38.7%
				3	3.8%
4	Mother's education				
	a) No formal education.	3	3.8%	8	10%
	b) Primary education	39	48.7%	27	33.8%
	c) High school	28	35%	35	43.7%
	d) Graduate	10	12.5%	10	12.5%
5	Mother's occupation				
	a) Home maker	34	42.5%		52.5%
	b) Coolie	10	12.5%	42	15%
	c) Government	19	23.8%	12	2.5%
	employee	17	21.2%	2	30%
	d) Private employee			24	
6	Type of family				
	a) Nuclear	44	55%		63.8%
	b) Joint	36	45%	51	36.2%
				29	
7	Place of residence				
	a) Hostel	58	35%		66.3%
	b) Home	14	42.5%	53	20%
	c) Paying gust	8	22.5%	16	13.7%
				11	

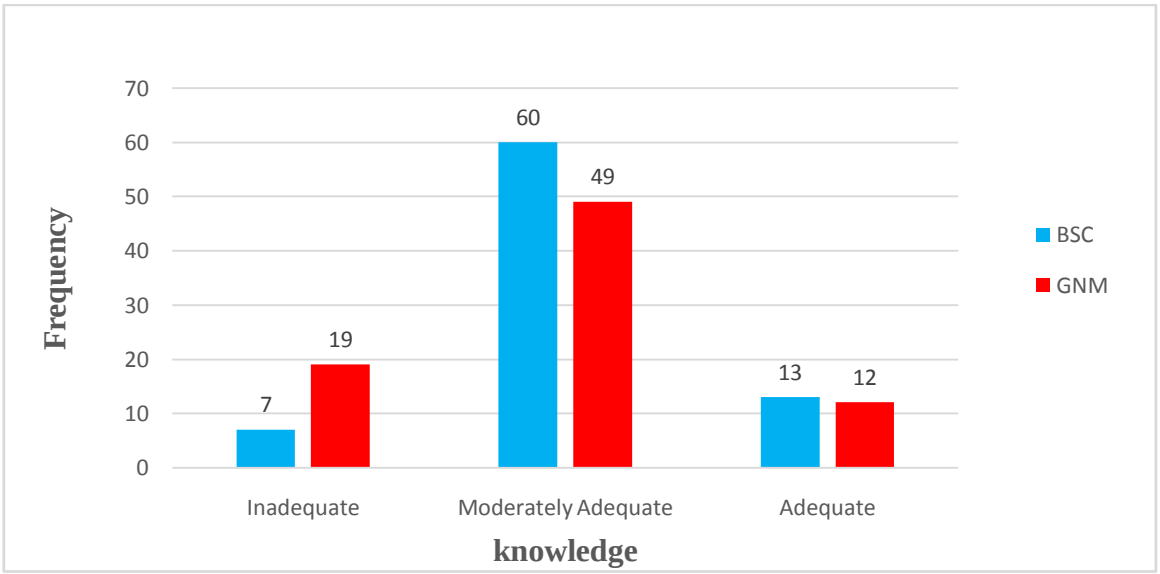
SECTION 2

Description of samples according to their level of knowledge.

TABLE 2: Frequency and percentage level of knowledge of nursing students.

Level of knowledge	BSC		GNM	
	F	%	**F**	**%**
Inadequate (0-6)	7	8.75%	19	23.7%
Moderately adequate (7-13)	60	75%	49	61.3%
Adequate (14-20)	13	16.25%	12	15%

Figure 1: knowledge level of BSC and GNM nursing students.



SECTION 3

Comparison of the knowledge level of BSC and GNM students

TABLE 3: Mean, median, standard deviation and t value

Course	N	Mean	Median	Range	St deviation	t	Sig. (2-tailed)
BSC	80	10.24	10	4-17	2.93	1.02	0.31 NS
GNM	80	9.68	10	2-19	3.98		

NS: Not Significant.

SECTION 4

Association between levels of knowledge regarding physical examination with their selected personal variables

TABLE 4: T TEST BSC

Demographic Variables	Option	N	Mean	St deviation	T Value	Sig.(2-tailed)
Age	18-19 20-21	54 26	10.41 9.88	2.98 2.84	0.74	0.45 NS
Sex	Male Female	7 73	11.14 10.15	3.38 2.90	0.85	0.39 NS
Type of family	Nuclear Joint	44 36	9.93 10.61	2.84 3.04	-1.03	0.30 NS

NS: Not Significant

TABLE 5: ANOVA TEST BSC

Demographic Variables	Option	N	Mean	St deviation	F	Sig
Religion of family	Hindu Christian Muslim	16 62 2	11.94 9.76 11.50	2.88 2.80 3.53	3.57	0.02 S*
Mothers education	No formal education. Primary education High school Graduate	3 39 28 10	10.33 10.69 9.86 9.50	.577 3.22 2.95 1.84	.67	.57 NS
Mother's occupation	Home maker Coolie Government employee Private employee	34 10 19 17	10.26 8.80 10.42 10.82	2.74 1.75 2.96 3.69	1.05	0.37 NS
Place of residence	Hostel Home Paying gust	58 14 8	10.17 10.14 10.88	2.92 2.93 3.31	0.20	0.81 NS

S*: Significant NS: Not Significant

TABLE 6: T TEST GNM

Demographic Variables	Option	N	Mean	Std. Deviation	T Value	Sig.(2-tailed)
Age	18-19 20-21	59 21	9.81 9.29	4.10 3.67	0.51	0.60 NS
Sex	Male Female	11 69	9.27 9.74	5.21 3.79	-0.35	0.72 NS
Type of family	Nuclear Joint	52 28	9.50 10.00	2.84 3.04	-0.53	0.59 NS

NS: Not Significant

TABLE 7: ANOVA TEST GNM

Demographic Variables	Option	N	Mean	St deviation	F	Sig
Religion of family	Hindu	46	9.20	3.86		
	Christian	31	10.35	4.05	0.79	0.45
	Muslim	3	10	5.56		NS
Mothers education	No formal education.	8	9.50	4.37		
	Primary education	27	9.70	3.52		
	High school	34	10.06	4.04	0.39	0.75
	Graduate	11	8.55	4.86		NS
Mother's occupation	Home maker	42	9.83	3.90		
	Coolie	12	9.33	4.92	0.16	0.92
	Government employee	2	8.00	5.65		NS
	Private employee	24	9.71	3.74		
Place of residence	Hostel	52	10.13	4.14	2.05	0.13
	Home	16	9.75	3.75		NS
	Paying gust	12	7.58	3.08		

NS: Not Significant

RECOMMENDATION

A similar study can be reproduced on large sample size to generalize the findings.

A comparative study can be conducted to assess the knowledge and attitude among nursing students and staffs.

A study can be conducted by administrating different teaching programs on knowledge and skill regarding physical assessment

A study can be conducted to assess barriers of physical assessment skill among nursing students.

CONCLUSION:

The findings of the study revealed that the BSC and GNM nursing students had moderately adequate knowledge regarding physical examination. The mean knowledge score of BSC students were found to be 10.24 (60.2%) with standard deviation 2.93 and mean knowledge score of GNM students were found to be 9.68 (50.9%) with standard deviation 3.98. Knowledge of BSC students regarding physical examination had significant association with their selected personal variable of religion. Although nursing students were oriented and educated about physical assessment in the nursing curriculum, this is not often practiced in clinical settings. The point that is if nursing students are incorrectly performing the patient assessment, then no amount of critical thinking could lead to better clinical decisions. Continuous exposure to various programs related to physical examination will help to improve their knowledge in particular area. If the students are assured about their knowledge it will enhance self-confidence and skill which are vital to assess the patient's health status effectively and minimize the barriers to performing the physical assessment.

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