

# Knowledge and Attitude towards Nursing Profession among Higher Secondary Science Students Enrolled in Selected Higher Secondary Science Colleges in Pune City.

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## ABSTRACT

A descriptive study to assess the level of knowledge and attitude towards nursing profession among higher secondary science students of selected colleges in Pune.

Nursing is an art, and if it is to be made an art it requires as exclusive as a devotion, as hard a preparation, as any painter's or sculptor's work; for what is the having to do with dead canvas or cold marble compared with having to do with the living body-the temple of God's Spirit? It is one of the fine Arts; I had almost said the finest of Fine Arts. -Florence Nightingale The objective of the study was,

- 1) To assess the level of knowledge about nursing profession.
- 2) To assess the attitude towards nursing profession.
- 3) To find out association between selected demographic variables and level of knowledge and attitude towards nursing profession.

A descriptive evaluative approach was used. The study was conducted in selected colleges in pune city. The sample composed of 150 higher secondary science students studying in selected colleges. The sampling technique used in this study was non probability convenience method of sampling. A structured questionnaire and attitude scale on nursing profession was used for data collection. The content validity of tool was established by 14 experts against the criteria checklist. Based on the suggestions of the experts the final draft of tool was prepared. Reliability of the tool was tested by split half method. The questionnaire and attitude scale found to be reliable.

Pilot study was conducted during the month of December 2019 on 10 higher secondary science students. 150 samples were selected for final data collection as per inclusion criteria. Descriptive statistics was used for data analysis and interpretation. The data collected was analyzed in terms of frequency, percentage, and "P" value and co-efficient of correlation and presented in the forms of tables.

**Results:** Distribution according to gender depicts that 54% are male candidate and 46% are female candidate. Distribution of samples according to family income show that up to 38% candidate have family income 10000, 28% have 10000 - 20000 income, 34% have 20000 and above. Distribution of samples according to religion in which 98.7% belong to Hindu religion, 1.3% belongs to Muslim.

Distribution of sample according to father education in which the candidate whose father are educated up to 10 this standard is 46%, up to 12th standard is 23.3% and graduated are 30.7%. Distribution of sample according to mother education in which the candidate whose mother are educated up to 10 this standard is 60%, up to 12th standard is 24.7% and graduated are 15.3%. Distribution of samples according to father's occupation in which the candidate whose father has government job is 26%, Private Job 34%, and labour job 10% and any other job are 30%. Distribution of samples according to mother occupation in which the candidate whose mother are housewife are 80.7%, labour work is 10.0%, and any other 9.3%.

Distributions of samples according to region where they live are, in urban 61.3 % candidate lives, and in rural 38.7% candidate. Distribution of samples according to the candidate who are cared by nurse in which 66% candidate were cared and 34% were not cared. Distribution of samples according to the candidate who heard about the nursing in which 80.7 % candidate heard and 19.3% candidate not heard. Distribution of samples in which the medium through which they heard about the nursing in which through family members are 64%, through T V are 12.7% and through newspaper are 4%.

**Conclusions:** In this study it was observed that samples have poor knowledge about nursing profession but have positive attitude towards nursing profession. According to our observation the objective of assessing knowledge and attitude towards nursing profession was achieved.

**Key Words:** Knowledge, attitude, higher secondary science students, nursing profession.

## Introduction

Nursing is an art, and if it is to be made an art it requires as exclusive as a devotion, as hard a preparation, as any painter's or sculptor's work; for what is the having to do with dead canvas or cold marble compared with having to do with the living body-the temple of God's Spirit? It is one of the fine Arts; I had almost said the finest of Fine Arts. [1] -Florence Nightingale

Although the origin of nursing predates mid-19th century, the history of professional nursing traditionally begins with Florence Nightingale. Nightingale, the well-educated daughter of wealthy British parents, defined social conventions and decided to become a nurse. The nursing of strangers, either in hospitals or in their homes, was not then seen as a respectable career for well-bred ladies, who, if they wish to nurse, were expected to do so only for sick family and intimate friends. In a radical departure from these views, Nightingale believed that well-educated women, using scientific principles and informed education about healthy lifestyles, could dramatically improve the care of sick patients. In 1854 Nightingale had the opportunity to test her beliefs during Britain's Crimean war. Newspaper stories reporting that sick and wounded Russian soldiers nursed by religious orders fared much better than British soldiers. In response, the British government asked Nightingale to take a small group of nurses to the military hospital at Scutari (modern-day Uskudar, Turk). Within days of their arrival, Nightingale and her nurses had recognized the barracks hospital in accordance with 19th century science: walls were scrubbed for sanitation, windows opened for ventilation, nourishing food prepared and served, and medications and treatments efficiently administered. Within weeks' death rates plummeted, and soldiers were no longer sickened by infectious diseases arising from poor sanitary conditions. Within months a grateful public knew the work of the "Lady with the Lamp," who made nightly rounds comforting the sick and wounded. By the end of the 19th century, the entire Western world shared Nightingale's belief in the worth of educated nurses. [2]

### Nursing – As a Profession

A profession is defined as an occupation with ethical components that is devoted to the promotion of human and social welfare. The services offered by a profession are based on specialized knowledge and skills that have been developed in a scientific and learned manner.

1. A profession is a form of employment especially one that is respected in society as honourable and is possible only for an educated person and after training in some special branch of knowledge.
2. A profession has its own body of knowledge based on social and scientific principles.
3. The members of a profession utilize this knowledge to identify and solve problems.
4. A profession constantly enlarges its body of knowledge through research in order to improve its services to the society.
5. A profession has service aim as well as academic and theoretical aim. The services offered by a profession are in response to the needs of the society and are fundamental to the promotion of human and social welfare.
6. A profession has a code of ethics.
7. A profession determines the qualification necessary for those who enter into the practice.

Professional nursing is a service committed to the promotion of human and social welfare. Nursing helps to attain this objective by applying scientific knowledge and skills to the services which include caring for the sick, promotion and restoration of health and prevention of diseases. These services are provided in cooperation with the medical and paramedical groups that are concerned with the health care. The professional nursing services meet the physical, psychological, spiritual and social needs of the human beings. [3]

### Nursing in 21st Century

For the nurses, the future holds numerous social, technological and political changes. The ongoing changes will shape nursing into a stronger and more efficacious profession. Technology will continue to develop rapidly. Nursing informatics will revolutionize nursing. Technological advances such as genetic engineering, new imaging devices etc., will have an impact on nursing.

During the 21st century, societies will continue to move towards globalization, with an increased sharing of products, attitude and financial investments. Clients will continue to make independent choices about their health care. Concepts like health tourism, health insurance packages, attractive friendly health care institutes, cooperative multispecialty health care campus facilities, walk-in-day surgery facilities will also affect the concepts and practice of nursing. The modern nurse must be prepared to use knowledge, skills and research to provide the best possible care to the client. The nurse must also become a member of professional organization and communicate with legislatures to shape the future of the nursing profession. [4]

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**Need of the study**

Nursing is highly popular profession according to the bureau of labour statistics; more than two and half million peoples in the U.S. hold a registered nursing license. Many studies worldwide report that interest in nursing as a career is low. Only 5.2% of a sample of high school respondents in Saudi Arabia intended to pursue nursing after school. A study in Tanzania showed that, of all the medically related profession, nursing was the least popular with only 9% of students expressing an interest, while among Asian students in Australia less than 10% were interested in nursing as a profession. The perception that nursing is becoming less popular as a career choice amongst South African school leavers required further investigation. Improving the complement of nurses in the country is crucial to improving quality of care. According to the article published by 'Times of India' (Mumbai) dated on 09-05-2016, Maharashtra has shortfall of 1 lakh nurses. According to the article published by med bulletin, in India there is crippling shortage of nurses. India has only 1.7 nurses available per thousand populations against WHO recommendation of 2.5 nurses per thousand populations. In other words, the country is short of 2.5 million nurses. Only by investigating the knowledge and attitude towards nursing attempts can be made to attract more nurses into the profession. Some of these factors may be unique to the South African context, while others may reflect wider international trends. However, once they are identified, targeted efforts can be made to change the attitudes and perceptions and so recruit more school leavers into the nursing profession. Based on above facts and review of literature the researcher felt that nursing is less popular and low status profession. Hence investigator felt need to assess the level of knowledge and attitude towards nursing profession among higher secondary science students.

**Background of the study**

The nursing profession is changing rapidly; it owes much to the influence of Florence Nightingale (1820-1910), a woman with a vision who is a pioneer of nursing. When nursing was regarded with contempt, Miss Nightingale crusaded to change the world's view of a nurse. Her contribution is the education of women, her development of theories of nursing practice and hygienic techniques, the emphasis on the preparation of nurses for the care of sick, protection and promotion of health of the individuals and society are important facts of nursing spectrum today (Nancy, 1991).

According to the list of provisional vacancy position for institutional level round as per Notice No. 51 dated on 23-09-2019, there is 30.17% vacancy in private Nursing colleges of Maharashtra

state and 10.5% vacancy in government Nursing colleges of Maharashtra state though it was 6th round for admission to the nursing course. From these we can conclude that students are less interested in joining the nursing course. In India, the picture of nursing profession is changing day by day, while nursing profession still suffers a mild degree of so called stigma in certain states of the counter. It is very essential that we must target a younger population. If we have to attract younger students, we must emphasize lifelong learning and possibilities that a bound with further education and credentialing. So researcher felt the need to conduct the current research.

**Review of Literature**

The review of literature is a systematic search of published works to gain information about research topic. It is compilation of work conducted in the area of general interest helps the researcher in the formulation or classification of research problem; it also helps in choosing the specific procedures and instruments that might be productive in further steps. Related research literature was reviewed to broaden the understanding and to gain insight into the selected areas under study.

The review is organized under following headings;

**Section I:** International studies

**Section II:** National studies

**International studies:** The study was conducted in 2012, by Snjezana Cukljek, on changes in nursing students' attitude towards nursing during undergraduate study. The sample consist of 115 nursing students enrolled in first study year in the academic year 2012/2013 and 106 students of third study year in the academic year 2014/2015 at the university of Applied Health Sciences in Zagreb. The results revealed that students' attitude changed during the study, influenced by the acquisition of knowledge and skills. During the study, students acquire a more realistic perception of nursing, and adoption of professional values emerges. [5]

The study was conducted in 2017, by Wajed A. Hatamleh, and Eric Hans L. Sorio, on knowledge, attitude and intention towards nursing profession among pre-clinical students in Saudi Arabia. The sample consists of 128 pre-clinical male and female students from a nursing school in Riyadh. The results revealed that in general, participants had good knowledge of the nursing profession and the majority of the students disagreed that the nursing is a profession for females only. However, about 60% of the participants were not interested to study nursing. Regarding the causes that avoid them to become nurse, 'requires working with the opposite sex' ( $P < 0.001$ ) was found with the greatest influence on intension. In consideration of the existing provision on males and females working together in Saudi Arabia, the students found this

condition as a hindrance in deciding on the nursing profession as a career. Moreover, careers such as nursing that unintentionally permits working with the opposite sex would make them become disinterested in the profession. Furthermore, it was pointed out that because the people do not respect the nursing profession ( $P=0.030$ ), the students choose not to become a nurse and perhaps escape from the negative consequences. [6]

The study was conducted in 2015, by Marwa K. Mohammed and Laila M. Abdo on identifying knowledge and attitude of secondary school students towards nursing profession in Cairo Governorate. The sample consists of 1293 students enrolled in randomly selected 22 experimental and non-experimental governmental secondary schools from 22 educational directorates in Cairo Governorate. The results revealed that students of study sample had inadequate knowledge regarding some aspect about nursing profession as educational preparation of the nurse, nurse's work hours, promotion opportunities, nurse's gender and nurse's role. The students had negative attitude towards nursing profession. There is relation between the students' knowledge and attitude toward nursing profession.

**National studies:** The study was conducted in 2012, by Akoijam Mamta Devi, on knowledge and attitude toward nursing as profession and their preference for nursing as a career among senior secondary students in India. The sample consists of 100 senior secondary students from Jasana, Faridabad. The results revealed that 74% of the total subjects had good knowledge, 24% had average knowledge, 2% had poor knowledge. 96% of the total subjects had positive attitude, 4% had neutral attitude, 0% had negative attitude. It was found that there is no significant association between the knowledge and demographic variables. There was also no significant association found between the attitude and demographic variables. [7] The study was conducted in 2014, by Mahesh B. Chendake, Vaishali R. Mohite, Manisha C. Gholap, on knowledge and attitude regarding nursing profession among professional college teachers in Karad, Maharashtra, India. The sample consists of 219 professional college teachers in Karad, Maharashtra. The results revealed that overall knowledge is excellent and attitude is positive. There is significant correlation between knowledge and attitude. [8]

The study was conducted in 2018, by Reny Thomas, on attitude of public toward nursing in selected community of district Patiala, Punjab, India. The sample consists of 100 males and females ranging from age 20-40 from village Ghaggar Sarai, Rajpura, Patiala. The results revealed that 45% were scored high score, 53% were average and 2% were low score on attitude

scale. It was suggested that the most adolescents are aware of the calling and helping nature of nursing but have little knowledge about the diverse nursing career opportunities in teaching, management and administration. [9]

The study was conducted by Vijaya lakshmi Poreddi, Ram Chandra, Reddemma Konduru, Prathibha Swamy, Suresh Bada Math on attitudes and perceptions of nursing profession among undergraduate nursing students. The sample consists of 129 male and female students who are undergoing undergraduate nursing program at selected college of Nursing, Bangalore, India. The results revealed that 44 (34.1%) of the subjects enrolled in nursing out of their own interest. 63 (48.8%) of the subjects agreed that social prejudice has great influence on nursing students in choosing nursing profession as their career. [10]

The study was conducted in 2016, by Lakhveer Kaur, Kanika and Ajesh Kumar, on attitude of nursing students towards nursing profession in selected nursing institutes Ambala, Haryana, India. The sample consists of 687 nursing students from the M.M. institutes of Maullana, Ambala, and Haryana, India. The result revealed that majority of nursing students 624 (90.83%) have favourable attitude towards nursing profession. B.Sc. Nursing 1st year students, GNM students and Post Basic Nursing 1st year students had more favourable attitude than other students/ other classes. [11]

The study was conducted in 2013, by Prof. Mridula Das, Miss Barkha Devi, Mrs. Ranjita Devi, Sanjay Doma Bhutia on knowledge and attitude towards nursing profession among adolescent students of Sikkim. The sample consist of 30 students from the schools of each community who were within 14-19 years of age group belonging to the selected schools of rural and urban community of Sikkim studying in 11th and 12th class. The results revealed that knowledge of urban school students (352) found to be better than knowledge of rural school students (319). However, the attitude score of urban community ( $P<0.05$ ) but no relationship found between knowledge and attitude in rural community ( $P>0.05$ ). [12]

The study was conducted in 2015, by Sheeba, C and Delphin, Virginia and Esakiammal, A and Belsy, M and Rani, R. on knowledge and attitude of higher secondary school students regarding nursing profession in a selected school in Kanya kumari district, South India. The sample consists of 100 students studying in 11th standard in selected schools in Kanya kumari, South India. The results revealed that 60% of the students had moderately adequate knowledge and 90% of them had unfavourable attitude towards nursing profession. [13]

## Methods

Research methodology refers to the master plan specifying the procedures for collecting and analyzing the needed information in the research study. Research methodology in the present study includes the following: Research approach, Research design, research setting, Population and sampling technique, the exclusion and inclusion criteria, developments and description of knowledge questionnaire and attitude scale, pilot study, procedure of data collection and plan for data analysis.

**Research approach:** In view of nature of problem selected for the present study and objectives to be accomplished, descriptive approach was considered appropriate for the present study.

**Research design:** The research design is blueprint for conducting a study. The purpose of design to maximize control over factors that could interfere with validity of the findings. The research design selected for the present study was non-experimental survey design.

**Research setting:** Setting refers to the area where study is being conducted. The present study was conducted in selected colleges in Pune city.

**Population:** In the current study the population was higher secondary science students. 150 samples were selected for the present study.

**Sampling technique:** For the present study researcher used non probability convenient sampling technique.

### Criteria for selection of samples

#### Inclusion criteria:

1. Willing to participate in study.
2. Available at the time of data collection.

#### Exclusion criteria:

1. Not willing to participate.
2. Absent at the time of data collection.

**Selection and development of tool:** Based on the objective of the study, structured knowledge Questionnaire and attitude scale was selected by the researchers. Following steps were carried out in developing the tool:

1. Literature review regarding knowledge about nursing profession.
2. Discussion with the experts in the field of nursing.
3. Informal discussion with the teachers.
4. Preparation of blueprint.
5. Preparation of tool.
6. Validation of tool.
7. Reliability check of the tool.
8. Final draft of the tool.

**Description of tool:** The tool selected for the study was structured knowledge questionnaire and attitude scale which comprised of three sections. They were:

1. Demographic information
2. Structured knowledge questionnaire comprising of 20 questions.
3. Attitude scale comprising of 25 statements.

**Validity of tool:** Tool was validated by teaching faculty of college of nursing BJ medical College and Sassoon General Hospital, Pune. There was consensus among the experts about items. Hence minor mistakes which requires correction was corrected under the guidance of guide.

**Reliability of tool:** The reliability of the tool was computed using split half method. The reliability coefficient of knowledge questionnaire was  $r = 0.79$  and reliability coefficient of attitude scale was  $r = 0.78$ .

**Pilot study:** Administrative approval was obtained from Principal of selected colleges in Pune city and pilot study was conducted. The purpose of the pilot study was:

1. To evaluate the tool constructed.
  2. To find out the feasibility of conducting final study.
  3. To determine the method of statistical analysis.
- The investigator selected 10 higher secondary science students and administered the tool. The data was collected and analyzed by descriptive and inferential statistics.

**Procedure of data collection:** The research investigator takes formal permission from the Principal of selected colleges. Main study was conducted among 150 samples.

Method used for data collection was,

1. The research investigator introduced him and explained the purpose of the study.
2. The written consent was obtained from the participants.
3. Data collected was then tabulated and analyzed.

**Plan for data analysis:** The data collected was analyzed in the terms of objectives of the study using descriptive and inferential statistics. The plan of the data analysis was developed under the excellent direction of the experts in the field of nursing and statistics. The plan of data analysis was as follows:

1. Organization of data in master sheet.
2. Tabulation of data in terms of frequency, percentage, mean, median, mode and standard deviations.

**Statistical Analysis**  
**Table 1: Analysis of demographic variables**

Sr. No.	Demographic Data	Frequency	Percentage
<b>1</b>	<b>Gender</b>		
	Male	81	54%
	Female	69	46%
	Total	150	100%
<b>2</b>	<b>Family Income</b>		
	Up To 10,000/Month	57	38%
	10,000 To 20,000/Month	42	28%
	20,000 And Above/Month	51	34%
	Total	150	100%
<b>3</b>	<b>Religion</b>		
	Hindu	148	98.70%
	Christian	0	0%
	Muslim	2	1.30%
	Total	150	100%
<b>4</b>	<b>Father's Education</b>		
	Up To 10 <sup>th</sup> Standard	69	46%
	10+2 Pass	35	23.30%
	Graduation Completed	46	30.70%
	Total	150	100%
<b>5</b>	<b>Mother's Education</b>		
	Up To 10 <sup>th</sup> Standard	90	60%
	10+2 Pass	37	24.70%
	Graduation Completed	23	15.30%
	Total	150	100%
<b>6</b>	<b>Father's Occupation</b>		
	Government	3	26%
	Private	51	34%
	Labor Work	15	10%
	Any Other	45	30%
	Total	150	100%
<b>7</b>	<b>Mother's Occupation</b>		
	Housewife	121	80.70%
	Labor Work	15	10.00%
	Any Other	14	9.30%
	Total	150	100%
<b>8</b>	<b>Region</b>		
	Rural	58	38.70%
	Urban	92	61.30%
	Total	150	100%
<b>9</b>	<b>Cared By Nurse</b>		
	Yes	99	66%
	No	51	34%
	Total	150	100%
<b>10</b>	<b>How Was Experience</b>		
	Good	74	49.30%
	Average	23	15.30%
	Bad	53	35.30%
	Total	150	100%
<b>11</b>	<b>Herad About Nursing</b>		

	Yes	121	80.70%
	No	29	19.30%
	Total	150	100%
<b>12</b>	<b>Medium of Hearing</b>		
	Family Members	96	64%
	Television	19	12.70%
	Newspaper	6	4%
	Total	150	100%
<b>13</b>	<b>Anyone in Nursing</b>		
	Yes	33	22%
	No	117	78%
	Total	150	100%
<b>14</b>	<b>Career Preference</b>		
	MBBS	49	32.70%
	Engineering	28	17.30%
	Nursing	14	9.30%
	Other	61	40.70%
	Total	150	100%

**Section II**

Analysis and interpretation of knowledge and attitude scores of higher secondary science students regarding nursing profession.

**Table 2: Mean Median, Mode, and Standard Deviation of knowledge scores of higher secondary science students regarding nursing profession.**

Area of analysis	Mean	Median	Mode	Standard Deviation
Knowledge score	9.5	9	9	2.3

The above table 2 reveals that mean knowledge score was 9.5, median 9, mode 9 and standard deviation 2.3.

**Table 3: Mean median, mode and standard deviation of attitude scores of higher secondary science students regarding nursing profession.**

Area of analysis	Mean	Median	Mode	Standard Deviation
Attitude score	89.97	90	93	10.52

The above table 3 reveals that mean attitude score was 89.97, median 90, mode 93 and standard deviation 10.52.

**Table 4: Frequency and Percentage distribution of knowledge scores of higher secondary science students regarding nursing profession.**

Level of knowledge	Knowledge score	
	Frequency	Percentage
Good	1	1%
Average	70	47%
Poor	79	53%

The above table 4 shows that most of the participants 79(53%) had poor knowledge, 70(47%) ha average knowledge and 1(1%) had good knowledge about nursing profession.

**Table 5: Frequency and Percentage distribution of attitude scores of higher secondary science students regarding nursing profession.**

Level of attitude	Attitude score	
	Frequency	Percentage
Positive	79	53%
Negative	71	47%

The above table 5 shows that most of the participants 79(53%) had positive attitude towards nursing profession and 71(47%) had negative attitude towards nursing profession.

**Section III****Table 6: Association between knowledge score and selected demographic variables.**

Demographic Variables	Frequency	Percentage	Correlation Coefficient	“P” Value
<b>Gender</b>				
Male	81	54%	0.01	0.67 P>0.05
Female	69	46%		
<b>Family Income</b>				
Up To 10,000/Month	57	38%	0.03	0.28 P>0.05
10,000 To 20,000/Month	42	28%		
20,000 And Above/Month	51	34%		
<b>Religion</b>				
Hindu	148	98.7%	0.01	0.54 P>0.05
Christian	0	0%		
Muslim	2	1.3%		
<b>Father’s Education</b>				
Up To 10 <sup>th</sup> Standard	69	46%	0.02	0.50 P>0.05
10+2 Pass	35	23.3%		
Graduation Completed	46	30.7%		
<b>Mother’s Education</b>				
Up To 10 <sup>th</sup> Standard	90	60%	0.04	0.14 P>0.05
10+2 Pass	37	24.7%		
Graduation Completed	23	15.3%		
<b>Father’s Occupation</b>				
Government	3	26%	-0.07	0.08 P>0.05
Private	51	34%		
Labour Work	15	10%		
Any Other	45	30%		
<b>Mother’s Occupation</b>				
Housewife	121	80.7%	-0.02	0.50 P>0.05
Labour Work	15	10.0%		
Any Other	14	9.3%		
<b>Region</b>				
Rural	58	38.7%	-0.01	0.62 P>0.05
Urban	92	61.3%		

The above table 6 shows that there was significant association between knowledge score and selected demographic variables as all calculated values are greater than table values. ( $p>0.05$ ).



Table 7 Association between Attitude Score and Selected Demographic Variables.

Demographic Variables	Frequency	Percentage	Correlation Coefficient	“P” Value
<b>Gender</b>				
Male	81	54%	0.01	0.01, P<0.05
Female	69	46%		
<b>Family Income</b>				
Up To 10,000/Month	57	38%	0.01	0.38, P>0.05
10,000 To 20,000/Month	42	28%		
20,000 And Above/Month	51	34%		
<b>Religion</b>				
Hindu	148	98.7%	0.0	0.85, P>0.05
Christian	0	0%		
Muslim	2	1.3%		
<b>Father’s Education</b>				
Up To 10 <sup>th</sup> Standard	69	46%	0.0	0.93, P>0.05
10+2 Pass	35	23.3%		
Graduation Completed	46	30.7%		
<b>Mother’s Education</b>				
Up To 10 <sup>th</sup> Standard	90	60%	0.0	0.56, P>0.05
10+2 Pass	37	24.7%		
Graduation Completed	23	15.3%		
<b>Father’s Occupation</b>				
Government	3	26%	0.0	0.92, P>0.05
Private	51	34%		
Labour Work	15	10%		
Any Other	45	30%		
<b>Mother’s Occupation</b>				
Housewife	121	80.7%	0.0	0.39, P>0.05
Labour Work	15	10.0%		
Any Other	14	9.3%		
<b>Region</b>				
Rural	58	38.7%	0.0	0.61, P>0.05
Urban	92	61.3%		

The Above Table 7 Shows That There Was Significant Association Between Attitude Score And Selected Demographic Variables As All Calculated Values Are Greater Than Table Value. (P>0.05), Except P<0.05 For Gender Where There Was No Significant Relation Found.

**Table 8: Impact of gender on knowledge and attitude towards nursing profession.**

Gender	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Male	9.33	47%	87.92	70%
Female	9.62	48%	92.37	74%

The above table 8 shows that there was minor positive impact of gender on knowledge and attitude score as knowledge score and attitude score of female participants was higher than male participants. Female knowledge score was 9.62(48%) where as male knowledge score was 9.33(47%). Attitude score of female participants was 92.37(74%) and that of male was 87.92(70%).

**Table 9: Impact of income on knowledge and attitude towards nursing profession.**

Income	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Up to 10,000/month	9.15	46%	88.98	71%
10,000 to 20,000/month	9.61	48%	89.95	72%
20,000 and above/month	9.68	48%	91.09	73%

Above table 9 shows that there was positive impact of income on knowledge and attitude score. Knowledge and attitude score slightly increased with increased in income/ month.

**Table 10: Impact of religion on knowledge and attitude towards nursing profession.**

Religion	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Hindu	9.45	47%	89.94	72%
Christian	0	0%	0	0%
Muslim	10.5	53%	92	74%

Above table 10 shows impact of religion on knowledge and attitude score. As there was no enough data available, impact of religion can't be expressed clearly. Knowledge score of Hindu participants is 9.45(47%) and attitude score was 89.94(72%) which is seen lower than knowledge score and attitude score of Muslim participants.

**Table 11: Impact of father education on knowledge and attitude towards nursing profession.**

Father education	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Up to 10th	9.33	47%	90.23	72%
10+2 pass	9.51	48%	88.37	71%
Graduation complete	9.63	48%	90.8	73%

Above table 11 shows that there was positive impact of father education on knowledge and attitude score of participants.

**Table 12: Impact of mother education on knowledge and attitude towards nursing profession.**

Mother education	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Up to 10th	9.15	46%	89.87%	72%
10+2 pass	10.18	51%	91.43%	73%
Graduation complete	9.52	48%	88	70%

Above table 12 shows that there was no impact of mother education on knowledge and attitude score of participants.

**Table 13: Impact of father occupation on knowledge and attitude towards nursing profession.**

Father occupation	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Government	9.56	48%	88.89	71%
Private	9.82	49%	91.05	73%
Labour work	10.13	51%	92.4	74%
Any other	8.87	44%	88.86	71%

Above table 13 shows that there was negative impact of father occupation on knowledge and attitude score of participants.

**Table 14: Impact of mother occupation on knowledge and attitude towards nursing profession.**

Mother occupation	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Housewife	9.5	48%	90.66	73%
Labour work	9.8	49%	84.06	64%
Any other	8.7	44%	90.35	72%

**Table 15: Impact of region on knowledge and attitude towards nursing profession.**

Region	Knowledge		Attitude	
	Frequency	Percentage	Frequency	Percentage
Rural	9.56	48%	89.48	72%
Urban	9.4	47%	90.28	72%

## Results

The findings of study were discussed under following headings:

- 1) Socio demographic variables of students
- 2) Knowledge score of students about nursing profession.
- 3) Attitude score of students towards nursing profession.
- 4) Frequency and percentage distribution of knowledge score.
- 5) Frequency and percentage distribution of attitude score.

### Findings related to demographic variables of participants:

1. Table 1 distribution according to gender depicts that 54% are male candidate and 46% are female candidate.
2. Distribution of samples according to family income show that up to 38% candidate have family income 10000, 28% have 10000 - 20000 income, 34% have 20000.
3. Distribution of samples according to religion in which 98.7% belong to Hindu religion, 1.3% belongs to Muslim.
4. Distribution of sample according to father education in which the candidate whose father are educated up to 10 this standard is 46%, up to 12th standard is 23.3% and graduated are 30.7%.
5. Distribution of sample according to mother education in which the candidate whose mother are educated up to 10 this standard is 60%, up to 12th standard is 24.7% and graduated are 15.3%.
6. Distribution of samples according to father's occupation in which the candidate whose father has government job are 26%, Private job 34%, and labour job 10% and any other job are 30%.
7. Distribution of samples according to mother occupation in which the candidate whose mother are housewife are 80.7%, labour work is 10.0%, and any other 9.3%.
8. Distributions of samples according to region where they live are, in urban 61.3 % candidate lives, and in rural 38.7% candidate.
9. Distribution of samples according to the candidate who are cared by nurse in which 66% candidate were cared and 34% were not cared.
10. Distribution of samples according to the candidate who heard about the nursing in which 80.7 % candidate heard and 19.3% candidate not heard.
11. Distribution of samples in which the medium through which they heard about the nursing in which through family members are 64%, through T V are 12.7% and through newspaper are 4%.

Findings related to knowledge and attitude score of higher secondary science students towards nursing profession.

1. The table no. 2 reveals that mean knowledge score was 9.5, median 9, mode 9 and standard deviation 2.3.
2. The table no. 3 reveals that mean attitude score was 89.97, median 90, mode 93 and standard deviation 10.52.

Findings related to frequency and percentage distribution of knowledge score.

Most of the participants 79(53%) had poor knowledge, 70(47%) had average and only 1(1%) had good knowledge about nursing profession.

Findings related to frequency and percentage distribution of attitude score.

Most of the participants 79(53%) had positive attitude and 71(47%) had negative attitude towards nursing profession.

## Discussion

The study was undertaken to assess the knowledge and attitude towards nursing profession among higher secondary science students enrolled in higher secondary colleges in Pune city.

## Implication

1. A present study will be used for nursing personnel to create awareness about nursing profession.
2. Nursing personnel can work on how to change the attitude toward nursing profession.
3. Career counselling about nursing can be started in the higher secondary colleges.

## Recommendation

1. A present study can be conducted in large population.
2. Comparative study can be done.
3. This study can be applied on the community.

## Conclusion

Based on the findings of the study, the following conclusion were drawn-

1. The overall knowledge score of participants was average.
2. Attitude towards nursing profession was positive.
3. Significant association found between knowledge score, attitude score and selected demographic variables. Thus it is concluded that students had poor knowledge about nursing profession and had positive attitude towards nursing profession.

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