

A Study to Assess Knowledge and Attitude Towards Nursing Profession Among Class XI and XII Standard Students in Selected Schools of West Bengal

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ABSTRACT

Nursing is one of the oldest and noblest profession. Nursing is the profession that combines physical science, social science, nursing theory and technology. Nursing is seemed to have numerous career advantages. These include there is the demand for nurses, many job opportunity, many choices in different speciality area. So, a study to assess knowledge and attitude among class XI and XII standard students towards nursing profession and find correlation between knowledge and attitude among class XI and XII standard students towards nursing profession. Quantitative descriptive survey research approach was adopted to collect data from 176 students selected by non-probability convenience sampling technique. Demographic proforma, structured knowledge questionnaire and 4-point rating scale were administered by self-report method to collect data. Findings revealed that majority 110(62.50%) students have inadequate knowledge and majority 123(69.89%) students have negative attitude towards nursing profession. Present study has several implications in nursing practice, education, administration and research. The study concluded that most of the students have inadequate knowledge and negative attitude towards nursing profession. The present study recommended to conduct further studies on determine the preparedness of senior secondary students for work as a professional nurse.

Keywords: Knowledge, Attitude, Class XI and XII standard students

INTRODUCTION

“The trained nurse has become one of the great blessings of humanity, taking a place beside the physician and the priest”.

-William Osler

Nursing is a noble profession. It is one of the most delightful arts, which needs blending of knowledge, skills and values. Nurses, care for individuals of all ages and cultural backgrounds that; are healthy and

ill; in a holistic manner based on the individuals physical, emotional, psychological, intellectual, social and spiritual needs. Nurses could also bring up themselves personally, professionally, psychologically and socially. In ancient times, nursing was considered as the job of the women who belongs to the poor families and those who have low reputation in the society[1]. Florence Nightingale began the

reformation of Nursing from an occupation to a profession. Nursing is the largest health care profession with 2.6 million registered nurses and many more needed in the future. Nursing is a profession within health care, that maintains or regains optimal health, the healthcare industry that focuses on the health care of individuals, families, and communities. The nursing profession is the backbone of the medical industry, and it is vital to improving quality of life and encouraging health, the largest professional group providing healthcare services are nurses[2]. Nurses represent the largest share of (38%) of the total workforce in India. Globally health systems are experiencing major shifts in health sector and creating an increasingly diverse yet interconnected world. Nurses are health professionals who are the corner stones of the health care system in each country[3]. Across-sectional study was undertaken on assessment of knowledge, attitude and intentions towards nursing profession in central China, 2021. The study was aimed to examine the knowledge, attitude and intention towards the nursing profession. Total 3764 high school graduates of selected schools in Central China were recruited by a random sampling method. It took participants approximately 10 to 15 minutes to complete the survey. The Attitudes Toward Nursing Career Questionnaire (ATNCQ)[26–28] which collects demographic data, nursing knowledge, attitudes and intentions about studying nursing was used for obtaining the data for this study. The study revealed that less than 10% of the participants expressed interest in a future career in nursing[4]. A shortage of nurses has been reported worldwide and about 9 million new nurses will be required to improve health workforce globally, by the year 2030. This noticeable shortage of nurses has been attributed to lots of factors, including low enrolment rates into the profession[5]. A descriptive study was undertaken on assessment of the level of knowledge and attitude towards nursing as a profession and their preference for nursing as a career

among senior secondary students of selected schools in Faridabad, 2015. The study was aimed to assess the level of knowledge and attitude towards nursing as a profession and their preference for nursing as a career. Total 100 students of higher secondary school were selected by purposive sampling technique. Checklist was used to assess the level of knowledge and 5-point Likert scale made to assess attitude towards nursing as a profession and their preference for nursing as a career. The study 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[6].

Purpose

The purpose of this study is to assess knowledge and attitude of class XI and XII standard students towards nursing profession.

Objectives

1. To assess knowledge of XI and XII standard students towards nursing profession.
2. To assess attitude of XI and XII standard students towards nursing profession.
3. To find association between level of knowledge with selected demographic variables among XI and XII standard students.
4. To find association between level of attitude with selected demographic variables among XI and XII standard students.
5. To find correlation between knowledge and attitude towards nursing profession among XI and XII standard students.

LITERATURE REVIEW

The related research and non-research literature were reviewed from published and unpublished thesis, books, journals through online search regarding knowledge and attitude towards nursing profession among class XI and XII standard students.

The relevant research and non-research related literature were reviewed and organised under following headings

- Assessment of knowledge towards nursing profession.
- Assessment of attitude towards nursing profession.

Assessment of knowledge towards nursing profession

Kaur S, Kaur K. conducted a descriptive study to assess the perception of students towards nursing profession and to determine the association of the knowledge with selected demographic variables at Adesh university, Bathinda, Punjab, 2020. The study was aimed to assess the perception of students towards nursing profession and to determine the association of the knowledge with selected demographic variables. Total 200 students were selected by convenience sampling technique. Data were collected by knowledge questionnaire and Likert scale. The study revealed that 78% of Nursing students were having favourable perception towards their profession followed by 25% of Medical and 28% of dental and 15% of physiotherapy. Study concluded that there is no significant association of the level of perception of students towards nursing profession with demographic variables [7].

Assessment of attitude towards nursing profession

Emire M.S., Haile T.G., Masino T. conducted a cross-sectional study on assessment of student's attitudes towards the nursing profession at Wolkite University, Ethiopia, 2021. The study was aimed to identify the attitudes of nursing students towards the nursing profession. Total 364 nursing students who have been enrolled at the University by using a simple random sampling method. Assess the student's attitudes towards the nursing profession by using a standardized self-administered questionnaire. The study revealed that a total of 364 participants completed the study questionnaires giving a response rate of 86.6% and nearly half of

170 with a range of the study participants showed a positive attitude towards the nursing profession. Study concluded that less than half of nursing students had a positive attitude toward the nursing profession. Age, Residence, Family monthly income, Students whose families reacted positively after they join the nursing Profession, and students who joined the nursing profession of their interest were significantly associated with the nursing profession. Thus, stake holders in universities, health science colleges, the ministry of education, the ministry of health, and Ethiopian nursing associations have to give due attention to enroll students who had their interest to join the nursing profession and portray a positive image of the nursing profession[8].

MATERIALS & METHODS

A quantitative descriptive survey research approach was adopted to collect data from 176 patients selected by non-probability sampling technique. Structured knowledge questionnaire & Rating scale were administered by interview method to collect data related knowledge & attitude towards nursing profession among class XI and XII standard students.

STATISTICAL ANALYSIS

Descriptive and inferential statistical analysis were used to analyse the data. The level of knowledge and attitude was computed by frequency and percentage distribution. The association between level of knowledge and attitude with socio demographic variables were assessed by Chi Square test. The correlation between knowledge and attitude were computed by coefficient of correlation formula.

RESULT

The findings revealed that majority 110 (62.50%) students had inadequate knowledge and majority 123(69.89%) students had negative attitude towards nursing profession. The main factors associated with the knowledge like required

qualification to join nursing course, available basic nursing courses, requirement to practice as a registered nurse, code of ethics in nursing, eligibility criteria while

apply in M. Sc nursing, job opportunities in India and abroad after passing nursing, basic structure and focus of care in nursing.

Table 1: Association between level of knowledge and selected demographic variables. n=176

Variables	Above median	Below median	χ^2	df	p value	Significance
1. Gender						
1.1 Male	32	50	10.78	1	3.84	S*
1.2 Female	60	34				
2. Educational qualification of father						
2.1 Primary	7	2	14.72	3	7.82	S*
2.2 Secondary	30	10				
2.3 Graduate and above	55	72				
3. Educational qualification of mother						
3.1 Primary	17	5	27.95	3	7.82	S*
3.2 Secondary	34	11				
3.3 Graduate and above	35	65				
3.4 No formal education	6	3				
4. Occupation of father						
4.1 Govt. employee	10	22	7.17	3	7.82	NS
4.2 Private employee	64	47				
4.3 Self- employed	16	14				
4.4 Others	2	1				
5. Occupation of mother						
5.1 Govt. employee	5	11	5.06	3	7.82	NS
5.2 Private employee	18	10				
5.3 Self employed	4	6				
5.4 Homemaker	65	57				
6. Family income per month						
6.1 5000-10,000	8	10	12.22	3	7.82	S*
6.2 10,001-15,000	18	14				
6.3 15,001-20,000	40	16				
6.4 Above 20,000	26	24				
7. Any nursing personnel in family						
7.1 Yes	32	7	17.81	1	3.84	S*
7.2 No	60	77				
8. Any nursing personnel in neighbourhood						
8.1 Yes	21	40	11.9	1	3.84	S*
8.2 No	71	44				
9. Major source of information regarding nursing profession						
9.1 Mass media	11	20	4.23	2	5.99	NS
9.2 Books/ magazine	4	3				
9.3 Friends/ relatives	77	61				
10. Information regarding employment opportunity after passing nursing course						
10.1 Yes	13	28	9.05	1	3.84	S*
10.2 No	79	56				

*S= significant. (p<0.05)

The data presented in the table 1 shows that the calculated chi square values between knowledge and demographic variables like gender, educational qualification of father and mother, family income per month, any nursing personnel in family and neighbourhood, information regarding employment opportunity after passing nursing course were significant at 0.05 level of significance. Therefore, null hypothesis was rejected and research hypothesis was accepted by depicting that there is a significant association between level of knowledge regarding nursing profession among class XI and XII standard students

with above mentioned selected demographic variables. But the calculated values between knowledge and selected demographic variables like occupation of father and mother, major source of information regarding nursing profession were not significant at 0.05 level of significance. Hence, the null hypothesis was failed to be rejected by depicting that there is no significant association between level of knowledge regarding nursing profession among class XI and XII standard students with above mentioned selected demographic variables.

Table 2: Association between level of attitude and selected demographic variables. n=176

Variables	Above median	Below median	χ^2	df	p value	Significance
1. Gender						
1.1 Male	38	44	0.23	1	3.84	NS
1.2 Female	40	54				
2. Educational qualification of father						
2.1 Primary	3	6	22.82	3	7.82	S*
2.2 Secondary	5	35				
2.3 Graduate and above	70	57				
3. Educational qualification of mother						
3.1 Primary	13	9	11.18	3	7.82	S*
3.2 Secondary	27	18				
3.3 Graduate and above	38	71				
4. Occupation of father						
4.1 Govt. employee	19	13	19.31	3	7.82	S*
4.2 Private employee	36	75				
4.3 Self- employed	22	8				
4.4 Others	1	2				
5. Occupation of mother						
5.1 Govt. employee	6	10	1.5	3	7.82	NS
5.2 Private employee	15	13				
5.3 Self employed	5	5				
5.4 Homemaker	52	70				
6. Family income per month						
6.1 5000-10,000	7	11	11.85	3	7.82	S*
6.2 10,001-15,000	17	15				
6.3 15,001-20,000	33	23				
6.4 Above 20,000	21	49				
7. Any nursing personnel in family						
7.1 Yes	21	18	1.83	1	3.84	NS
7.2 No	57	80				
8. Any nursing personnel in neighbourhood						
8.1 Yes	39	22	14.54	1	3.84	S*
8.2 No	39	76				

9. Major source of information regarding nursing profession						
9.1 Mass media	11	20	1.52	2	5.99	NS
9.2 Books/ magazine	4	3				
9.3 Friends/ relatives	63	75				
10. Information regarding employment opportunity after passing nursing course						
10.1 Yes	18	23	0	1	3.84	NS
10.2 No	60	75				

*S= significant. (p<0.05)

The data presented in the table 2 shows that the calculated chi square values between level of attitude and demographic variables like educational qualification of father and mother, occupation of father, family income per month, any nursing personnel in neighbourhood were significant at 0.05 level of significance. Therefore, null hypothesis was rejected and research hypothesis was accepted by depicting that there is a significant association between level of attitude regarding nursing profession among class XI and XII standard students with above mentioned selected demographic variables. But the calculated values between

attitude and selected demographic variables like gender, occupation of mother, any nursing personnel in family, major source of information regarding nursing profession, information regarding employment opportunity after passing nursing course were not significant at 0.05 level of significance. So, the null hypothesis was failed to be rejected by depicting that there is a no significant association between attitude regarding nursing profession among class XI and XII standard students with above mentioned selected demographic variables.

Table 3: Correlation between knowledge and attitude. n=176

Variables	Mean	Median	SD	'r' value
Knowledge	9.68	9.65	3.30	r=-0.16 slight almost negligible negative relationship
Attitude	65.61	66.5	6.92	

The data presented in table 3 shows the mean and standard deviation of knowledge was 9.68 + 3.30 and attitude was 65.61 + 6.92 respectively. The median of knowledge and attitude was 9.65 and 66.5 respectively. The calculated coefficient of correlation is -0.16. So, there was slight almost negligible negative relationship correlation between knowledge and attitude. Therefore, null hypothesis was failed to be rejected and depicting that there is no significant relationship exists between score of knowledge and attitude.

DISCUSSION

In the present study the sample characteristics shows that, majority (65%) of the students were female, majority (72.15%) of the student's fathers were

graduate, majority (56.81%) of the student's mothers were graduate, majority (63.06%) of the student's fathers were private employee, majority (69.31%) of the student's mothers were homemaker, maximum (39.77%) of the student's family income was above 20,000, majority (77.84%) of the students had no nursing personnel in their family, majority (65.34%) of the students had no nursing personnel in their neighbourhood, majority (78.40%) of the students received information about nursing from friends/relatives, majority (76.70%) of the students had no information regarding employment opportunity after passing nursing course.

The present findings were supported by the following study:

Malkar R, Khobragade S, Misar R, Kadam R, Kengar G, Kagne D. conducted a non-experimental descriptive research study on assessment of perceptions towards nursing profession among higher secondary students in selected area of Pune, 2020. The study result revealed that among 100 students most of students were female (52%), maximum (45%) of students belongs to 16 - 17 years of age group, maximum of (40%) student's mothers belongs to primary education, maximum of (35%) student's fathers belongs to primary education, majority of (54%) student's mothers were housewife, maximum of (35 %) student's fathers were daily wage worker, majority of (57%) students lives in urban area, maximum of (42%) student's family income was between 20,000- 30,000/- family income. discuss findings of your study with relevant reasoning along with proper citations/references[9].

The first objective was to assess knowledge of XI and XII standard students towards nursing profession.

The finding of the present study showed that based on the total score of level of knowledge among class XI and XII standard students towards nursing profession, Majority 110(62.50%) students have inadequate knowledge towards nursing profession.

The present study finding was supported by following study:

Nisha M, Kanmani K, Kanniammal C. conducted a non-experimental descriptive study to assess level of knowledge and attitude towards nursing profession and the preference for nursing as a career among high school students in a selected government higher secondary school at Kancheepuram, 2024. The study result revealed that among 100 students 42(42%) had adequate knowledge, 58(58%) had inadequate knowledge towards nursing as a profession and their preference for nursing as a career[10].

The second objective was to assess attitude of XI and XII standard students towards nursing profession.

The finding of the present study showed that based on the total score of level of attitude among class XI and XII standard students towards nursing profession, majority 123(69.89%) students have negative attitude towards nursing profession.

The present study finding was supported by following study:

Fahmy S, Mayez A, Ali RR. conducted an exploratory descriptive study on to explore the perception of nursing students towards nursing profession and perceived future job orientation at South Valley University, 2020. The study was aimed to explore the perception of nursing students towards nursing profession and perceived future job orientation. The study result revealed that among 290 students more than half of nurses (56.9%) had negative attitude towards nursing careers[11].

The third objective was to find association between level of knowledge with selected demographic variables among XI and XII standard students.

In the present study, there was significant association between knowledge and selected demographic variables such as gender, educational qualification of father and mother, family income per month, any nursing personnel in family and neighbourhood, information regarding employment opportunity after passing nursing course.

The present study finding was supported by following study:

Khatri A, Singh R. conducted a descriptive cross-sectional study on the knowledge and attitude towards the nursing profession among male secondary level students in Kathmandu, 2019. The study result revealed that among 388 students there was significant association found between knowledge towards the nursing profession with two of the socio-demographic variables grade of student and respondent's family,

friends and relatives in the nursing profession[12].

The fourth objective was to find association between level of attitude with selected demographic variables among XI and XII standard students.

In the present study, there was significant association between attitude and selected demographic variables such as educational qualification of father and mother, occupation of father, family income per month, any nursing personnel in neighbourhood.

The present study finding was supported by following study:

Islam MA, Shafique KMA, Islam MT, Rajib MSI. conducted a descriptive cross-sectional study on assessment of Perception of College Students towards Nursing as a Career Choice, 2020. The study result revealed that among 164 students there was significant relationship between perception and socio demographic characteristics such as religion of the students, occupation of the parents and family monthly income ($p < 0.05$) [13].

The fifth objective was to find correlation between knowledge and attitude towards nursing profession among XI and XII standard students.

In the present study, the calculated coefficient of correlation ($r = -0.16$) showed there was negative relationship between knowledge and attitude among class XI and XII standard students towards nursing profession.

The present study finding was supported by following study:

Das M, Devi B, Devi R, Bhutia SD. conducted a non-experimental survey study on assessment of knowledge and attitude towards nursing profession among adolescent students in selected schools of rural and urban community of Sikkim, 2013. The study result revealed that there is an inverse relationship between knowledge and attitude in school of urban community ($r = -0.094$) [14].

CONCLUSION

Based on findings, the study concluded that most of the students have inadequate knowledge and negative attitude towards nursing profession. The level of knowledge among class XI and XII standard students towards nursing profession was significantly associated with gender, educational qualification of father and mother, family income per month, any nursing personnel in family and neighbourhood, information regarding employment opportunity after passing nursing course. The level of attitude among class XI and XII standard students towards nursing profession was significantly associated with educational qualification of father and mother, occupation of father, family income per month, any nursing personnel in neighbourhood. There was no significant relationship between knowledge and attitude among class XI and XII standard students towards nursing profession.

Declaration by Authors

Ethical Approval: Administrable approval was taken from Principal of B.M. Birla College of Nursing and Administrative head of selected schools. Ethical approval was taken from ethics committee of B.M. Birla Heart Research Centre, Kolkata and Written assent from students and informed consent from parents.

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REFERENCES

1. Kathreena MU, Silva JJ, Lobo JM. A study to assess the attitude towards nursing profession among the nursing students in the selected college at Mangalore. *Int J Health Sci Res.* October 2015;5(10):217–20. Available from: www.ijhsr.org
2. Shiroor G, Podder L, Manna M. Knowledge and attitude regarding nursing as a Career among adolescence. *Int. j. multidiscip. res. dev.* August 2017;4(8):90-2. Available from: www.allsubjectjournal.com
3. Swarna S. Nursing students perception towards profession and future intentions. *IOSR Journal of Nursing and Health Science.* September-October 2015;4(5):30-4. doi: 10.9790/1959-04513034
4. Zhu S, Hu J, Gruber KJ, Li G, Li L, Ke Y. Knowledge, attitude and intentions towards nursing profession among Chinese high school graduates in central China. *J Nurs Educ Pract.* October 2021;12(2): 72-80. doi: <http://dx.doi.org/10.5430/jnep.v12n2p72>
5. Olubiyi SK, Fatimo IO, Omotoriogun M, Obafem GF, Oyewumi Z. Students perception and choice of nursing profession as a career in Kwara State, Nigeria. *Islamic University Multidisciplinary Journal.* 2020;7(1):248-52. Available from: https://www.academia.edu/42998188/Students_Perception_and_Choice_of_Nursing_Profession_as_a_Career_in_Kwara_State_Nigeria
6. Devi AM, Devi AS. Knowledge and attitude toward nursing as profession and their preference for nursing as a career among senior secondary students. *Int. J. Appl. Res.* 2015;1(10):401–3. Available from: www.allresearchjournal.com
7. Kaur S, Kaur K. Assessment of the perception of students towards Nursing profession in selected Colleges. *IOSR Journal of Nursing and Health Science.* May-June 2020;9(3):18-20. doi: 10.9790/1959-0903031820
8. Emire MS, Haile TG, Tesu M. Assessment of students' attitudes towards the nursing profession at wolkite university, Ethiopia, 2021. *Nursing Research and Reviews.* August 2022; 12:159–68. doi: <http://dx.doi.org/10.2147/nrr.s371365>
9. Malkar R, Khobragade S, Misar R, Kadam R, Kengar G, Kagne D. Assessment of perceptions towards nursing profession among higher secondary students in selected area of Pune. *Sinhgad e Journal of Nursing.* 2020;10(2):8-11. Available from: <http://www.sinhgad.edu/sinhgadnursingcollege-ejournal/VolumeX-Issue-II-Dec-2020/2.pdf>
10. Nisha M, Kanmani K, Kanniammal C. A Study to assess the knowledge and attitude of nursing profession and the preference for nursing as a career among high school students in a selected government higher

- secondary school at Kancheepuram Dt. *Int. J. All Res. Educ. Sci. Methods.* January 2024;12(1):33-41. doi: <https://doi.org/10.56025/IJARESM.2023.11122341>
11. Fahmy S, Mayez A, Ali RR. conducted an exploratory descriptive study on to explore the perception of nursing students towards nursing profession and perceived future job orientation at South Valley University. *Int. J. Health Sci Nurs.* June 2020;5(6):19-34. doi: <https://doi.org/10.53555/hsn.v5i6.3737>
12. Khatri A, Singh R. Knowledge and attitude towards the nursing profession among male secondary level students in Kathmandu. *J. Kathmandu Med. Coll.* July-September 2020;9(3):137-43. doi: <https://doi.org/10.3126/jkmc.v9i3.36412>
13. Islam MA, Shafique KMA, Islam MT, Rajib MSI. Assessment of perception of college students towards nursing as a career choice. *Asian Journal of Research in Nursing and Health.* 2020;3(1):1-9. Available from: <https://journalajrnh.com/index.php/AJRNH/article/view/26>
14. Das M, Devi B, Devi R, Bhutia SD. Knowledge and attitude towards nursing profession among adolescent students of Sikkim. *Asian J. Nur. Edu. & Research.* July-September 2014;4(3):364-71.
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