



Effectiveness of Structured Teaching Program on Secondary Students' Knowledge and Perception of Nursing as a Career Choice in Golaghat, Assam

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Abstract

Background: The nursing profession has evolved significantly, adapting to modern health-care needs. Choosing a career is a complex decision influenced by personal characteristics, societal values, and understanding of the profession. In the case of nursing, many individuals possess limited knowledge about its scope and responsibilities, often relying on misconceptions. Raising awareness and promoting a positive image of nursing can encourage more students to consider it as a viable career path. Raising awareness and creating a more positive image of the nursing profession can encourage further individuals to consider it as a career choice.

Materials and Methods: A quantitative, pre-experimental design was used, and the study was conducted in selected schools within the Golaghat district, Assam. Data were collected from a sample of 1015 secondary school students. Data collection tools included a demographic questionnaire, a structured knowledge questionnaire, and a perception scale.

Results: The post-test results showed a substantial enhancement in knowledge, with scores rising from a mean of 1.95 (standard deviation [SD] \pm 1.92) in the pre-test to 9.56 (SD \pm 2.32) post-intervention ($P < 0.001$). Furthermore, perception scores increased from 26.01 (SD \pm 8.90) to 48.17 (SD \pm 7.38) after the structured teaching program ($P < 0.001$). Only 10.64% students had adequate knowledge on nursing as a career choice during the pre-test, which increased to 95.66% during the post-test. Similarly, the percentage of students who perceived nursing as a good career choice was only 12.70% during pre-test, which increased to 88.86% after the intervention. A significant association was linked between knowledge of nursing as a career choice and the occupation of mother, while gender, maternal employment, and family ties to the nursing field were significantly associated with the perception toward nursing as a career choice.

Recommendations: More interventional studies can be conducted to educate the public and scholars about the different opportunities within nursing, from leadership positions to advanced clinical specializations.

Keywords: Career choice, knowledge, nursing career, perception, secondary school students

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INTRODUCTION

The field of nursing has evolved over centuries, continuously adapting to the demands of modern health care. Globally, nurses are recognized for their expertise, demonstrated through established protocols and guidelines. However, despite these advancements, nurses often face challenges such as societal stereotypes and a lack of recognition for their skills.

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The functions and roles of nurses in health care are not well understood by the general public.^[1] Nurses have historically been portrayed in a subordinate role to physicians, often perceived as women with limited education and lacking leadership potential. These stereotypes and negative characterizations exert undesirable constraints on the creation of positive perceptions of nurses' image and value, recruitment and retention of nursing students, and recruitment opportunities.^[2]

The roles and contributions of nurses remain largely misunderstood by the public. To enhance public awareness, targeted efforts are necessary to reshape how nursing is viewed and encourage more students to consider it as a viable career option. There is great disorientation among higher secondary students regarding nursing and nursing care. There is a need to improve the image of nurses in society to attract a larger number of students into this noble profession.^[3]

Personal experiences, media influences, and the opinions of family and friends shape students' career perceptions. Their view of nursing is often based on hospital observations, where nurses are seen performing basic care tasks, which may not be perceived as prestigious. Many students lack awareness of the academic training and career opportunities within nursing, as they have limited direct exposure to the profession.

Objectives of the study

1. To evaluate the effectiveness of the structured teaching program on nursing as a career choice among the secondary school students in selected schools of the Golaghat district, Assam.
2. To find the association between pre-test knowledge of nursing as a career choice and selected demographic variables.
3. To find the association between pre-test perception toward nursing as a career choice and selected demographic variables.

MATERIALS AND METHODS

The study followed a quantitative, pre-experimental design and was conducted in selected schools within the Golaghat district, Assam. Using a probability sampling technique, 1015 secondary school students participated in the research.

A multistage random sampling technique was used to select a sample from the target population. The selection of this sampling technique was aimed at achieving a better representation of the population and avoiding sampling bias. The stages were as follows:

- Stage-1: Random selection of two blocks out of a total of five blocks in the Golaghat district, Assam.
- Stage-2: Random selection of two clusters from each block.
- Stage-3: Random selection of 50% secondary schools from each cluster.
- Stage-4: Selection of a representative sample from each school.

Data collection tools and techniques

The tool used for data collection included a self-structured, self-administered tool consisting of a demographic proforma, a knowledge questionnaire, and a 3-point Likert scale, which were developed after a review of related and relevant literature.

- Tool-1: Demographic *pro forma*
- Tool-2: Consisted of two sections
- Section-I: Knowledge questionnaire.
This tool consisted of 12 questions on the historical background of nursing, different nursing courses, the selection process for entry into nursing courses, regulatory bodies, and job opportunities in nursing. The total score of the tool was 12.
- Section-II: 3-point Likert scale on perception toward nursing as a career choice. This tool consisted of 20 statements related to perception. The total score of the tool was 60.

Validity and reliability of tool

The tool was sent to experts in the nursing field for establishing validity, and necessary corrections were made. The reliability of the tool was established after pre-testing of the tool during the pilot study. The reliability was established using the split-half method, and the reliability coefficient was found to be 0.8, which indicated that the tool was reliable.

Development of a structured teaching program

A structured teaching program was designed after reviewing both research-based and general literature. To ensure clarity and comprehension, the content was simplified for the learners. The program covered various aspects, including the history and progression of nursing, current trends, educational pathways, regulatory bodies, roles within the profession, specialized branches, career prospects, and notable awards and recognitions in nursing.

Data collection procedure

Approval was obtained from the Institutional Review Board to conduct the study. Permissions were obtained from the Inspector of Schools, Golaghat District, and the Principals/Head masters of the selected schools before data collection.

The data collection took place between September 2024 and December 2024. The schools were visited twice, with a 1-week interval between the visits. During the first visit, participants were introduced to the study, informed of its purposes, and assured of data confidentiality. After obtaining written consent, tools were distributed among the students, and 20 min were allotted to administer the pre-test. The structured teaching program was delivered on the same day. The post-test assessment occurred during the second visit, a week later, measuring knowledge and perception changes.

Statistical analysis

Data underwent verification for consistency and accuracy before being presented in tables and graphs. Continuous

variables were expressed as mean \pm standard deviation (SD), whereas categorical variables were represented through frequency and percentages. Data were verified by normality testing before analysis. Comparisons between pre-test and post-test scores were conducted using paired *t*-tests, whereas Chi-square tests examined associations between demographic variables and knowledge and perception. A significance level of $P < 0.05$ was applied. Data analysis was done using the Statistical Package for the Social Sciences version 16.0.

Table 1: Frequency and percentage distribution according to demographic characteristics

Variable	Frequency	Percentage
Age		
13–15 years	377	37.1
16–18 years	638	62.9
Gender		
Male	464	45.7
Female	551	54.3
Religion		
Hindu	874	86.1
Muslim	120	11.8
Christian	17	1.7
Others	4	0.4
Education of the mother		
No formal education	188	18.5
Primary education/up to 5 th standard	289	28.5
Secondary education/10 th –12 th standard	461	45.4
Graduate and above	77	7.6
Education of the father		
No formal education	221	21.8
Primary education/up to 5 th standard	221	21.8
Secondary education/10 th –12 th standard	485	47.8
Graduate and above	88	8.7
Occupation of the mother		
Housewife	792	78.0
Private service	77	7.6
Government service	69	6.8
Self employed	77	7.6
Occupation of the father		
Unemployed	379	37.3
Private service	212	20.9
Government service	110	10.8
Self employed	314	31.0
Area of residence		
Rural	850	83.7
Urban	165	16.3
Any person in the family belonging to the nursing profession		
Yes	192	19.0
No	823	81.0
Source of career-related information		
Parents	374	36.8
Teachers	266	26.2
Friends	53	5.2
Print media: books, newspapers, and magazines	145	14.3
Mass media: radio, TV, and Internet	177	17.4

RESULTS

Findings indicated that most students (62.9%) were between 16 and 18 years old, with females constituting 54.3% of the sample. The majority (86.1%) were identified as Hindu. Parental education levels varied, with 45.4% of mothers and 47.8% of fathers having completed secondary education. While 78% of mothers were housewives, 37.3% of fathers were reported as unemployed. A significant portion (83.7%) of students lived in rural areas, and 36.8% relied on parents for career-related information. [Table 1].

The post-test results showed a substantial improvement in knowledge, with scores rising from a mean of 1.95 (SD \pm 1.92) in the pre-test to 9.56 (SD \pm 2.32) post-intervention ($P < 0.001$). Similarly, perception scores improved from 26.01 (SD \pm 8.90) to 48.17 (SD \pm 7.38) after the structured teaching program ($P < 0.001$) [Tables 2 and 3].

A significant association was found between knowledge of nursing as a career choice and the mother's occupation ($\chi^2 = 16.43$, $P = 0.001$). While gender ($\chi^2 = 6.02$, $P = 0.014$), parental employment ($\chi^2 = 14.42$, $P = 0.002$; $\chi^2 = 8.61$, $P = 0.035$), and family ties to the nursing field ($\chi^2 = 5.11$, $P = 0.024$) were found to be significantly associated with perception toward nursing as a career choice [Tables 4 and 5].

It was found that only 108 (10.64%) students had adequate knowledge of nursing as a career choice during the pre-test, which increased to 971 (95.66%) during the post-test. Similarly, the number of students who positively perceived nursing as a career before the structured teaching program was 129 (12.70%). During the post-test, 902 (88.86%) of the students developed a positive perception of nursing as a career [Figures 1 and 2].

DISCUSSION

This study revealed that a vast majority (89.35%) of secondary school students had inadequate knowledge about nursing, with only 10.64% demonstrating an adequate understanding during the pre-test. Similarly, perceptions of nursing as a career were overwhelmingly negative, as 87.30% of students exhibited unfavorable views, whereas only 12.70% had a positive perception.

A statistically significant association was found between students' knowledge of nursing and their mothers' occupation. Furthermore, gender, parental occupation, and having family members in the nursing profession were key factors influencing students' attitudes toward nursing as a career option.

Table 2: Comparison of pre-test and post-test knowledge on nursing as a career choice

Group	Mean score	Standard deviation	Mean difference	D (f)	t-value	P-value	Remarks
Pre-test	1.95	± 1.92	7.61	1014	-77.385	<0.001	S*
Post-test	9.56	± 2.32					

*S: Significant at $P < 0.05$

Table 3: Comparison of pre-test and post-test perception toward nursing as a career choice

Group	Mean score	Standard deviation	Mean difference	D (f)	t-value	P-value	Remarks
Pre-test	26.01	±8.90	22.16	1014	-59.829	<0.001	S*
Post-test	48.17	±7.38					

*S: Significant at $P < 0.05$

Table 4: Association between knowledge of nursing as a career choice and selected demographic variables

Variables	χ^2	D (f)	P-value	Remarks
Age	3.50	1	0.061	NS*
Gender	3.66	1	0.056	NS*
Education of the mother	2.34	3	0.50	NS*
Education of the father	3.99	3	0.26	NS*
Occupation of the mother	16.43	3	0.001	S*
Occupation of the father	1.28	3	0.733	NS*
Any person in the family belonging to the nursing profession	3.72	1	0.53	NS*
Source of career-related information	6.73	4	0.151	NS*

*S: Significant at $P < 0.05$, *NS: Not significant

Table 5: Association between perception toward nursing as a career choice and selected demographic variables

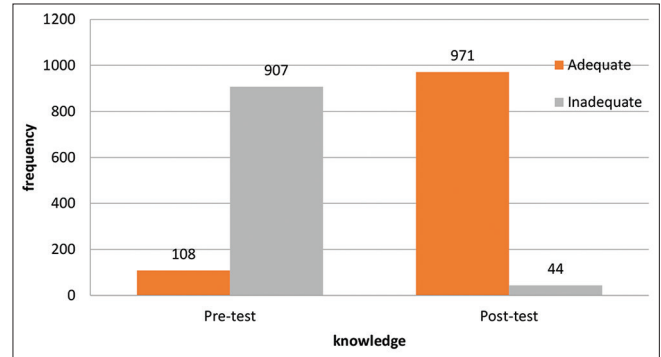
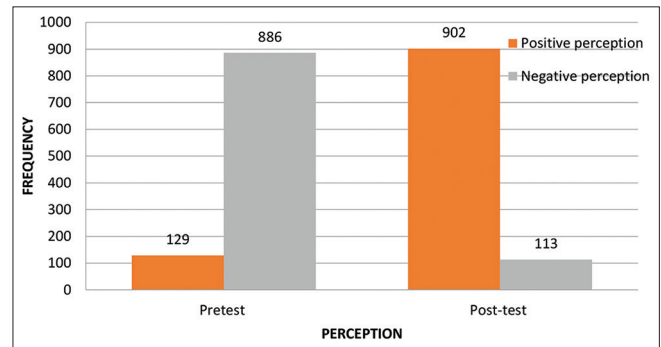
Variable	χ^2	D (f)	P-value	Remarks
Age	3.14	1	0.076	NS*
Gender	6.02	1	0.014	S*
Education of the mother	5.97	3	0.113	NS*
Education of the father	3.04	3	0.386	NS*
Occupation of the mother	14.42	3	0.002	S*
Occupation of the father	8.61	3	0.035	S*
Any person in the family belonging to the nursing profession	5.11	1	0.024	S*
Source of nursing career-related information	2.18	4	0.703	NS*

*S: Significant at $P < 0.05$, *NS: Not significant

These findings align with previous research. Das and Ganguly^[4] conducted a study among 176 students in West Bengal, analyzing their knowledge and attitudes toward nursing. They reported that most students lacked awareness and held negative perceptions of the profession, highlighting the need for further research to assess secondary students' readiness for nursing careers.

Similarly, Akhtar *et al.*^[5] examined nursing-related knowledge among 200 secondary school students in Lahore. Their results indicated that 73% of participants wrongly believed that individuals without formal nursing education could enter the field. In addition, students had misconceptions regarding nurses' work hours, career growth, and gender representation. Their study confirmed that overall attitudes toward nursing remained predominantly negative.

In Assam, Sarma^[6] explored factors shaping students' perceptions of nursing. The study revealed that variables such as age, gender, religion, and family income significantly influenced how students viewed the profession.

**Figure 1: Frequency distribution of pre-test and post-test knowledge on nursing as a career choice****Figure 2: Frequency distribution of pre-test and post-test perception toward nursing as a career choice**

Implications

In nursing practice

A positive perception of the profession strengthens the nursing practice and leads to improved patient outcomes.

In nursing administration

Applying the findings of this study, nursing directors can develop strategies to increase recruitment and retention and nurses' long-term commitment to the field.

In nursing education

This study's findings will aid in assessing how well new students are prepared to enter the nursing profession and support their readiness for entrance examinations by similar awareness programs at schools and coursework. Understanding new students' level of preparedness will help shape strategies for guiding them through entrance examinations and nursing courses.

Recommendation

Understanding the prevailing misconceptions about nursing is pivotal for shaping public perception and promoting the

profession's true value. Targeted interventions can help bridge the gap between perception and reality, ensuring that nursing is recognized for its moxie, autonomy, and contributions to health care. Expanding interventional studies across different populations and settings can further improve awareness, encouraging more individuals to consider nursing as a feasible and reputable career path.

CONCLUSION

Improving public perception of nursing can positively impact recruitment and professional satisfaction. The study verified that structured educational programs effectively enhance knowledge and reshape perceptions toward nursing. Going forward, health-care directors should launch awareness campaigns to further promote nursing as a respectable and fulfilling career.

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CONFLICT OF INTEREST

No conflict of interest.

REFERENCES

1. Sawant P, Xavier S. Assess the attitude and perception of secondary high school and junior college students towards nursing profession from Uttan community. *Int J Appl Res* 2018;4:70-3.
2. Sacgaca L, Pasay E, Alqarni AS, Pangket P, Alshammari SA, Ramadan MY, *et al.* Sociocultural and perceived public image of nurses among nursing students: The mediating role of self-concept. *BMC Nurs* 2024;23:298.
3. 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-J Nurs* 2020;10:8-11.
4. Das D, Ganguly S. A study to assess knowledge and attitude towards nursing profession among class XI and XII standard students in selected schools of West Bengal. *Int J Health Sci Res* 2024;14:154-63.
5. Akhtar S, Hussain M, Afzal M, Gilani SA. Knowledge and attitude of secondary school students towards nursing profession. *Eur Acad Res* 2019;6:6505-22.
6. Sarma A. A study to assess the perceived image of nursing profession and influencing factors among Bsc nursing students of Kamrup Metro Assam. *Int J Multidiscip Res* 2024;6: 1-15.

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