



“EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING NABH STANDARDS AMONG THE STUDENTS OF SELECTED NURSING COLLEGES OF KAMRUP, ASSAM; AN EVALUATIVE STUDY”

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ABSTRACT

BACKGROUND:

Nurses are the backbone of the patient care in hospitals, so knowledge of nurses regarding standards of NABH protocol affects the patient care. Awareness of nurses regarding NABH protocol is one of the important aspects of health care system in India. Patients are the biggest beneficiaries from NABH accreditation, as it results in high quality of care and patient safety. The patient gets services by credential medical staff. It also helps the staff of the hospital as it provides continuous learning and good working environment. As the nation's hospitals face increasing demands to participate in a wide range of quality improvement activities, the role and influence of nurses in these efforts is also increasing. Hospitals confront challenges with regard to nursing involvement, including scarcity of nursing resources, difficulty engaging nurses at all levels—from bedside to management, growing demands to participate in more activities often duplicative, quality improvement activities, the burdensome nature of data collection and reporting and shortcomings of traditional nursing education in preparing nurses for their evolving role in today's contemporary hospital setting. Because nurses are the key caregivers in hospitals, they can significantly influence the quality of care provided and ultimately, treatment and patient outcomes. Consequently, hospitals' pursuit of high-quality patient care is dependent, at least in part, on their ability to engage and use nursing resources effectively, which will likely become more challenging as these resources become increasingly limited. In recent years, emphasis on improving the quality of care provided by the nation's hospitals has increased significantly and continues to gain momentum. Because nurses are integral to hospitalized patients' care, nurses also are pivotal in hospital efforts to improve quality. As hospitals face increasing demands to participate in a wide range of quality improvement activities, they are reliant on nurses to help address these demands.¹

OBJECTIVES OF THE STUDY

1. To assess the knowledge on NABH standards among the nursing students before and after administration of structured teaching programme.
2. To evaluate the effectiveness of structured teaching programme regarding NABH standards
3. To find out the association between knowledge score with selected demographic variables among the nursing students.

METHODS AND MATERIALS

A pre experimental one group pretest posttest research design was used in the study to accomplish the objectives. Multistage Sampling Technique was used for obtaining sample for the study. Study was undertaken on 135 samples in setting of selected nursing colleges of Kamrup, Assam. Respondents were selected on the basis of inclusive and exclusive criteria. Self-structured knowledge questionnaire on NABH standards was used as tool for study.

RESULTS

Study shows that majority of the students i.e 90(66.7%) students were in between 21-25 years,, 44 (32.6%) were in between 26-30 years and 1 was >30 years among which 132(97.8%) were female, 3(2.2%) were male. 71(52.6%) students were from B.Sc. Nursing 4th year, 20(14.8%) students were from Post Basic B.Sc. Nursing 1st Year and M.Sc Nursing 2nd year, 19(14.1%) students were from Post Basic B.Sc. nursing 2nd year, 5(3.7%) were from M.Sc. Nursing 1st year . In the pre test, all i.e 135 (100%) students had inadequate knowledge regarding NABH standards among the nursing students. In the post test 134 (99.26%) had adequate knowledge and only 1 (0.74%) had moderate knowledge regarding NABH standards among the nursing students. The Study shows that the pretest mean score of knowledge was 3.22 ± 1.68 and the post test mean score of knowledge was 18.93 ± 1.05 and the pre test mean percentage was 16.10% and post test mean percentage was 94.65%.The mean difference score was 15.71 and the mean percentage difference was 78.55%.The calculated t test value was 83.546 at $p < 0.0001$ level. This clearly infers that after the administration of STP regarding NABH standards among the nursing students was found to be effective in improving the level of knowledge in the post test. The demographic variables did not show statistically significant association with pretest level of knowledge regarding NABH standards among the nursing students. The study concluded that the structured teaching programme was effective in bringing the desired changes in the knowledge of nursing students on knowledge regarding NABH standards. Hence it can be used as an effective teaching strategy among the nursing students to improve knowledge regarding NABH standards as well as to apply the knowledge in the clinical fields.

CONCLUSION

Based on the analysis of the findings of the study, the following inferences were drawn. There was evident increase in the knowledge in all areas after administration of structured teaching programme on knowledge regarding NABH standards among the students of selected nursing colleges. Thus it was proved that structured teaching programme was an effective teaching method for improving knowledge regarding NABH standards.

KEY WORDS: Knowledge, NABH, Structured teaching programme, Effectiveness

1. INTRODUCTION

Quality has become an essential part of the management and evaluation of health care. The continual improvement of service quality in healthcare units has become a prime consideration to ensure patient satisfaction across the world in the modern economic scenario. Quality management techniques, often borrowed directly and unchanged, from manufacturing and service sector settings, have often not lived up to their promise in terms of improved health care provider performance and hospital competitiveness. In India, health sector is one of the largest and fastest growing sector in which both the private and government care providers and hospitals put much emphasis on quality improvement and patient satisfaction.

National Accreditation Board for Hospitals and Healthcare Providers (NABH) is an abbreviation for NABH which is an integral part of Quality Council of India (QCI), set up to establish and operate accreditation program for healthcare organizations. NABH was established in the year 2006 NABH is committed to enhance the development of healthcare quality service in our country for all levels of the population, through various methods and tools, to supplement the efforts of the providers of healthcare service and requirements of the system at various levels.

NABH standards consist of ten chapters which are being divided between patient-centered standards and organization-centered standards. All ten chapters consist of 683 stringent objective elements for the hospital to attain in order to get the NABH accreditation (4th Edition).

To comply with these standard elements, the hospital should have a process-driven approach in all aspects of hospital operations – from display of services, registration, admission, presurgery, perioperative period and postsurgery protocols, discharge from the hospital till follow-up with the hospital after discharge. The standards not only cover clinical aspects but also the governance of the hospital based on clear and transparent policies and protocols. In short, NABH aims to rationalize the entire operations of a hospital.

The first edition of standards was released in 2006 and after that the standards has been revised every 3 years. Currently the 5th edition of NABH standards, released in Aug. 2020 is in use. The first hospital to be accredited by NABH is B M Birla Heart Research Center, till date more than 838 hospitals in India has achieved accreditation by NABH. In public hospitals, Gandhinagar General hospital was the first to get NABH accreditation in 2009.

The NABH standards 4th edition standards are documented in 10 chapters, which are as follows

1. Access, Assessment and Continuity of Care
2. Care of Patients (COP)
3. Management of Medication (MOM)
4. Patient Rights and Education (PRE)
5. Hospital Infection Control (HIC)
6. Patients safety and quality improvement (PSQ)
7. Responsibilities of Management (ROM)
8. Facility Management and Safety (FMS)
9. Human Resource Management (HRM)
10. Information Management System (IMS)

NABH accreditation system is one of the methods for commitment to quality enhancement throughout the whole of the health care system in India. It involves all professional and service groups to ensure that high quality in health care is achieved, while minimizing the inherent risks associated with modern health care delivery. Quality Assurance should help to improve effectiveness, efficiency, cost containment, and should address accountability and the need to reduce errors and increase safety in the system. Thus the objective of NABH accreditation is on continuous improvement in the organizational and clinical performance of health services, not just the achievement of a certificate or award or merely assuring compliance with minimum acceptable standards.[4] Being a nurse and accountable for providing care to patients, to the society and to the profession by quality patient care, the investigator got inspired to do a study for assessing the effectiveness of structured teaching programme on towards NABH standards among the nursing students to gain more information for further development of knowledge and skills in practice.

As the nation's hospitals face increasing demands to participate in a wide range of quality improvement activities, the role and influence of nurses in these efforts is also increasing. Hospital organizational cultures set the stage for quality improvement and nurses' roles in those activities. Hospitals with supportive leadership, a philosophy of quality as everyone's responsibility, individual accountability, physician and nurse champions, and effective feedback reportedly offer greater promise for successful staff engagement in improvement activities.

Yet hospitals confront challenges with regard to nursing involvement, including scarcity of nursing resources, difficulty engaging nurses at all levels—from bedside to management, growing demands to participate in more activities often duplicative, quality improvement activities, the burdensome nature of data collection and reporting and shortcomings of traditional nursing education in preparing nurses for their evolving role in today's contemporary hospital setting. Because nurses are the key caregivers in hospitals, they can significantly influence the quality of care provided and ultimately, treatment and patient outcomes. Consequently, hospitals' pursuit of high-quality patient care is dependent, at least in part, on their ability to engage and use nursing resources effectively, which will likely become more challenging as these resources become increasingly limited.

In recent years, emphasis on improving the quality of care provided by the nation's hospitals has increased significantly and continues to gain momentum. Because nurses are integral to the hospitalized patients' care, nurses also are pivotal in hospital efforts to improve quality. As hospitals face increasing demands to participate in a wide range of quality improvement activities, they are reliant on nurses to help address these demands.

2. NEED OF THE STUDY

As the world is moving towards globalization, the life expectancy is increasing. On average, every person visits a hospital in every 17 years. According to the Journal of the American Medical Association, nearly 1,00,000 people die annually in hospitals due to medical negligence. Among them, 80,000 die from hospital-acquired infections that could have been prevented. So, the quality of services being rendered to patients is important. India is growing in the medical world and patients from different parts of the world are coming to India for treatment. This is possible only when the hospitals are maintaining the standards. In the past few years, there has been great pressure to improve the quality of nursing care in India. Because nurses are an integral part of the hospital and play a great role in patient care, a need is always felt to make improvement in nursing practices. To improve the quality of health care in health care industry in America Magnet status hospitals are considered as the standard hospitals with best nursing care. In India, too inspiration was taken from Magnet status hospitals and need was always felt to improve standards of nursing care. Therefore, in 2011 a report was published on "Reshaping nursing profession in Indian Hospitals" which stressed on the need to equip nurses with advanced knowledge and competence in a manner that they can prove their potentials.

INDIA

A study was conducted on "To assess effectiveness of plan teaching programme on national accreditation board for hospitals and health care providers (NABH) guidelines among newly recruited staff nurses at Krishna hospital, Karad, Maharashtra" The study shows majority of newly recruited nursing staff having 19.38% average knowledge and 17.85% having average practice towards NABH guidelines. Thus knowledge and practice score of newly recruited nursing staff between the pre-test and post-test was highly significant.

Another study was conducted on "to assess the knowledge & attitude towards NABH accreditation among the staff nurses working in Bombay Hospital, Indore, India. The study shows that there is a Partial Negative correlation between knowledge score and level of attitude [$r = 0.212$, $r(38) = 0.34$ $p > 0.05$]. There is a significant correlation between knowledge score and level of attitude. Findings of the study indicate that all the subjects were having good knowledge and negative attitude towards NABH accreditation and there is partial positive correlation between knowledge and attitude. Another descriptive study was conducted to assess the knowledge and attitude of staff nurses regarding quality assurance of national accreditation board for hospitals and healthcare providers (NABH) at the selected hospital of Mysuru city. Analysis of the findings revealed that majority 214(71%) of staff nurses have average knowledge regarding Quality Assurance of NABH and there is significant association found between the level of knowledge of staff nurses and their selected personal variables like educational qualification. The findings revealed that majority 175(58%) of staff nurses have positive attitude regarding Quality Assurance of NABH and there is significant association found between the level of attitude of staff nurses and their selected personal variables like educational qualification and there is a positive significant correlation ($r = 0.130$) between knowledge and attitude scores of staff nurses regarding Quality Assurance of NABH. Thus, it was concluded that majority of staff nurses are having the average knowledge and positive attitude regarding Quality Assurance of NABH

3. OBJECTIVES

1. To assess the knowledge on NABH standards among the nursing students before and after administration of structured teaching programme.
2. To evaluate the effectiveness of structured teaching programme regarding NABH standards
3. To find out the association between knowledge score with selected demographic variables among the nursing students.

4. METHODS AND MATERIALS

A pre experimental one group pretest posttest research design was used in the study to accomplish the objectives. Multistage Sampling Technique was used for obtaining sample for the study. Study was undertaken on 135 samples in setting of selected nursing colleges of Kamrup, Assam. Respondents were selected on the basis of inclusive and exclusive criteria. Self-structured knowledge questionnaire on NABH standards was used as tool for study.

5. DESCRIPTION OF THE TOOL

The tools used for the study consisted of two sections:

Section I: -Demographic variables: Age, gender, educational qualification

Section II:-Structured knowledge questionnaire: This part of the tool consisted of 20 questions (each question had one correct answer out of the four options). The questions were divided into the following headings:

Part A assess the general knowledge regarding NABH standards

Part B assess the knowledge regarding management of medication.

Part C assess the knowledge regarding patient rights and education

Part D assess the knowledge regarding Hospital Infection Control

Part E assess the knowledge regarding patient safety and quality improvement

Scoring key: Each question had only one correct answer. For every correct response a score of 1 mark was given and a score of 0 mark for incorrect response. Hence the maximum score was 20 and the minimum score was 0.

To interpret the level of knowledge, the scores were converted to percentage and were categorized as follows:

- Inadequate Knowledge <50 % (< 10 score)
- Moderate Knowledge 50-75% (10-15 score)
- Adequate Knowledge >75 % (15 - 20 score)

6. DATA COLLECTION PROCEDURE

Data collection period was scheduled from 9th September to 15th September,2023. Prior to data collection, the ethical clearance was obtained from ethical committee INS trust GNRC, Dispur. A formal written application was obtained from the respective Principal of the selected nursing colleges for conducting the research study by the investigator before the collection of data. The investigator visited the colleges on the given respective dates and was introduced to the students who fulfill the inclusion criteria. The investigator explained the purpose of her study and she assured them of the confidentiality and anonymity to get their co-operation and prompt response during data collection. A written consent was obtained from all the students. Then the pre test knowledge questionnaire was administered which took 20 minutes to complete in average. Structured teaching programme was given on the same day after completion of the pre test of each college respectively. The students interacted and cooperated well with the investigator and were satisfied with the information they got. Post test was administered to the same group of students using the same knowledge questionnaire on the seventh day after giving the structured teaching programme respectively.

7. RESULT SECTION-I

- **Frequency and percentage distribution of nursing students according to their demographic variables.**

Table 1: Frequency and percentage distribution of demographic variables of nursing students.
n =135

Demographic Variables	Frequency (f)	Percentage (%)
Age in years		
21 – 25	90	66.7
26 – 30	44	32.6
>30	1	0.7
Gender		
Male	3	2.2
Female	132	97.8
Education level		
B.Sc. Nursing 4 th year	71	52.6
Post Basic B.Sc. Nursing 1 st year	20	14.8
Post Basic B.Sc. Nursing 2 nd year	19	14.1
M.Sc. Nursing 1 st year	5	3.7
M.Sc. Nursing 2 nd year	20	14.8

The table 1 portrays that most of the nursing students, 90(66.7%) were aged between 21 – 25 years, 44(32.6%) were aged between 26-30 years, 1(0.7%) was aged >30 years,132(97.8%) were female, 3(2.2%) were male,71(52.6%) studying B.Sc. Nursing 4th year,20 (14.8%) studying Post Basic B.Sc. Nursing 1st year and M.Sc. Nursing 2nd year, 19 (14.1%) studying Post Basic B.Sc. Nursing 2nd year and 5 (3.7%) studying M.Sc. Nursing 1st year.

SECTION-II

- **Assessment of knowledge of the nursing student regarding NABH standards.**

Table 2: Frequency and percentage distribution of pretest and post test level of knowledge regarding NABH standards among the nursing students.

Knowledge	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Inadequate (<50%)	135	100%	0	0
Moderate (50-75%)	0	0	1	0.74%
Adequate (>75%)	0	0	134	99.26%
Total	135	100%	135	100%

The table 2 depicts the frequency and percentage distribution of pretest and post test level of knowledge regarding NABH standards among the nursing students.

It shows that in the pretest,135 (100%) had inadequate knowledge regarding NABH standards among the nursing students.

After the intervention, 134 (99.26%) had adequate knowledge and 1 (0.74%) had moderate knowledge regarding NABH standards among the nursing students.

SECTION III

- Assess the effect of structured teaching programmed on knowledge regarding NABH standards

Table-3 Effectiveness of Structured Teaching Programme on knowledge regarding NABH standards among the nursing students

n=135

Variables	Mean	S.D	Mean difference	Paired "t" test and p-value
Pre test	3.22	1.68	15.71	t = 83.546 p=0.0001, S***
Post test	18.93	1.05		

***p<0.001, S – Significant

The table 3 shows that the pretest mean score of knowledge was 3.22 with S.D. 1.68 and the post test mean score of knowledge was 18.93 with S.D. 1.05. The mean difference score was 15.71. The calculated t test value was 83.546 and p=0.0001. It clearly infers that there was significant difference between mean pretest and post-test knowledge score regarding NABH standards among the nursing students.

This shows that administration of STP on knowledge regarding NABH standards among nursing students was found to be effective in improving the post-test knowledge score which was also evident from the increase in mean score from 3.22 to 18.93.

SECTION-IV

- Association between pretest knowledge with selected demographic variables such as age in years, gender, educational qualification

Table 4: Association of level of knowledge regarding NABH standards among the nursing students before intervention with their selected demographic variables.

n= 135

Demographic Variables	Inadequate		Moderately Adequate		Chi-Square p-value / Fisher Exact test p-value
	F	%	f	%	
Age in years					p=0.346 N.S
21 – 25	49	36.6	41	30.6	
26 – 30	27	20.1	16	11.9	
>30	0	0	1	0.7	
Gender					p=0.256 N.S
Male	3	2.2	0	0	
Female	73	54.1	59	43.7	
Education level					$\chi^2=4.291$ d.f=4 p=0.368 N.S
B.Sc. Nursing 4 th year	39	28.9	32	23.7	
Post Basic B.Sc. Nursing 1 st year	11	8.1	9	6.7	
Post Basic B.Sc. Nursing 2 nd year	11	8.1	8	5.9	
M.Sc. Nursing 1 st year	1	0.7	4	3.0	
M.Sc. Nursing 2 nd year	14	10.4	6	4.4	

**p<0.01, S – Significant, p>0.05, N.S – Not Significant

CONCLUSION

Based on the analysis of the findings of the study, the following inferences were drawn:

The study shows that out of 135 students, majority i.e. 90(66.7%) students were in between 21-25 years, 44 (32.6%) were in between 26-30 years and 1 was >30 years, 132(97.8%) students were female, 3(2.2%) were male, 71(52.6%) students were from B.Sc. Nursing 4th year, 20(14.8%) students were from Post Basic B.Sc. Nursing 1st Year and M.Sc. Nursing 2nd year, 19(14.1%) students were from Post Basic B.Sc. nursing 2nd year, 5(3.7%) were from M.Sc. Nursing 1st year.

In the pretest, all the students i.e 135 (100%) students had inadequate knowledge regarding NABH standards among the nursing students. After the intervention, 134 (99.26%) had adequate knowledge and only 1 (0.74%) had moderate knowledge regarding NABH standards among the nursing students.

The study shows that the pretest mean score of knowledge was 3.22 ± 1.68 and the post test mean score of knowledge was 18.93±1.05 and the pre test mean percentage was 16.10% and post test mean percentage was 94.65%.The mean difference score was 15.71 and the mean percentage difference was 78.55%.The calculated t test value was 83.546 at p=0.0001. H₀ was rejected and H₁ was accepted which infers that there was significant difference between mean pretest and post-test knowledge score regarding NABH standards among the nursing students.

This shows that administration of STP on knowledge regarding NABH standards among nursing students was found to be effective in improving the post-test knowledge score which was also evident from the increase in mean score from 3.22 to 18.90 and mean percentage from 16.10% to 94.65 % respectively.

The association was statistically tested by fisher exact test and analysis depicted that the none of the demographic variables show statistically significant association with level of knowledge regarding NABH standards among the nursing students before intervention with their selected demographic variables at p<0.05 level

The study concluded that the structured teaching programme was effective in bringing the desired changes in the knowledge of nursing students on knowledge regarding NABH standards. Hence it can be used as an effective teaching strategy among the nursing students to improve knowledge regarding NABH standards as well as to apply the knowledge in the clinical fields.

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