

# Effectiveness of Awareness Programme on Criteria of NABH & Its Implementation among Health Care Workers at a Tertiary Care Hospital

Dr.H.N. Ravindra\*, Prachi D. Patel, Purvi M. Patel,  
Rashmi J. Patel and Hanish N. Sodha

## **Abstract---**

**Background of the study:** Health care system of India currently operating within an environment of rapid social, economic, technological, and hospitals are an integral part of health care system. Declaration of human rights generated lately because of increasing awareness among the consumer market for such as medical tourism insurance and corporate sector have accelerated the demand for quality in health care services that is paternalistic model to informative or physician centre care to patient centre health care quality improvement movement began in the early 1900s, with the assessment of hospital condition establishment of standards and services. NABH is a constituent board of Quality Council of India, set up to establish and operate accreditation programme for healthcare organizations. The board is structured to cater to much desired needs of the consumers and to set benchmarks for progress of health industry. Board while being supported by all stakeholders including industry, consumers, government, have full functional autonomy in its operation.

**Aims and Objective:** Investigator aimed to find the effectiveness of awareness programme regarding NABH criteria among health care workers.

**Material and Methods:** One group pre-test, post-test research design which belongs to pre-experimental design was selected to assess the effectiveness & awareness programme regarding criteria of NABH among the 287 health care workers working at a tertiary hospital at Vadodara. Simple random sampling was used to select the samples.

**Results:** The collection of the data was tabulated and analyzed by using descriptive and inferential statistics. In the pre-test mean score was 11.85 and post-test mean score 22.67. The post-test level of knowledge score is significantly greater than the pre-test knowledge mean score. The 't' value 34.24 is more than tabulated value at 0.05 level of significance.

**Conclusion:** According to the calculation of both pre-test and post-test score study reveals that there was improvement in knowledge of health care workers after administering the awareness programme NABH. Hence it indicates that the awareness programme was effective.

**Keywords---** Awareness, NABH, Health Care Workers, Tertiary Care Hospital.

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Dr.H.N. Ravindra\*, Principal, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat, India.  
E-mail: ravindrahn23@rediffmail.com

Prachi D. Patel, Undergraduate Nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat, India.

Purvi M. Patel, Undergraduate Nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat, India.

Rashmi J. Patel, Undergraduate Nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat, India.

Hanish N. Sodha, Undergraduate Nursing Student, Sumandeep Nursing College, Sumandeep Vidyapeeth Deemed to be University, Vadodara, Gujarat, India.

## I. INTRODUCTION

Health is a fundamental human right. Today's healthcare consumers are knowledgeable and expect quality care. The concept of evidence-based quality improvement was present as early as the 1850s when Florence Nightingale demonstrated that basic sanitation and hygiene standards led to decreased mortality<sup>1</sup>. A healthcare worker is one who delivers care and services to the sick are approximately 59 million worldwide.<sup>2</sup> National Accreditation Board for Hospital and Healthcare providers known as NABH is committed to support improvement of quality of healthcare service in our country.<sup>3</sup> NABH is a constituent board of Quality Council of India, set up to establish and operate accreditation Programme for healthcare organizations. The board is structured to cater to much desired needs of the consumers and to set benchmarks for progress of health industry. Board while being supported by all stakeholders including industry, consumers, government, have full functional autonomy in its operation. In India, the Health System currently operates within an environment of rapid social, economic and technical changes. Such changes raise the concern for the quality of health care. The focus on health promotion, disease prevention, treatment and rehabilitation within the community is fast gaining higher importance.<sup>4</sup> The staff in an accredited health care organization will be satisfied as it provides for continuous learning, good working environment, leadership and above all ownership of clinical processes. Accreditation to a health care organization stimulates continuous improvement. It enables the organization in demonstrating commitment to quality care and raises community confidence in the services provided by the health care organization. It also provides opportunity to healthcare unit to benchmark with the best.<sup>5</sup>

**AIMS AND OBJECTIVE:** Investigator aimed to find the effectiveness of awareness programme regarding NABH criteria among health care workers.

**HYPOTHESIS:** H<sub>1</sub>: There will be a significant difference between post test knowledge score as compared with pre test. H<sub>2</sub>: There will be a significant association between pre-test knowledge score with their demographic data.

## II. MATERIAL AND METHODS

The present study aimed to assess the effectiveness of awareness program on NABH criteria among health care workers, a quantitative approach was used to assess the effectiveness of health care workers regarding NABH criteria, the research design used was pre experimental one group pre-test Post-test design, the independent variable in this study was awareness program on criteria's of NABH, the dependent variable was Knowledge Regarding NABH criteria among healthcare workers. Place of study was Dhiraj general hospital, Vadodara, Gujarat. Source of data was the health care workers who are working in Dhiraj general hospital. Population for this study is HCWs working in Dhiraj General Hospital. There are 572 population including 165 Doctors, 297 Nurses, 28 Physiotherapists, 70 Paramedical staff, 12 Administrative staff were considered as a samples as per the inclusive criteria. Sample technique for research study was Simple random sampling technique according to the set inclusive criteria. Alternative HCWs were chosen from the list of Population. An inclusion criterion for the present study was the Nurses, Doctors, Physiotherapists Paramedical staff, and administrative staff currently working in selected tertiary care hospital. Exclusion criteria for the present study was HCWs those who were the age below 20 and above 60, HCWs those who had undergone NABH training. To ensure content validity of the tool, the self structured

questionnaire was sent to 3 experts. The recommendation and suggestions of the experts were considered to modify the items of the tool as well as the content of self structured questionnaire. Structured knowledge questionnaire was used to assess knowledge of NABH. Demographic data which includes variables such as Age, Gender, Previous exposure to NABH, Category of health care workers, Year of experience of health care workers. The Structured knowledge questionnaire consists of a 30 questions regarding basic question related to NABH and Criteria of NABH. The 67%-100% score that considered was good knowledge score, the 34%-66% score that considered Average knowledge score and 0%-33% was considered poor knowledge score.

The formal permission was obtained from the concerned authority for the data collection. The investigator selected 287 health care workers who are meeting the inclusion criteria for data collection by using simple random sampling technique. The investigator selected the subject and established the rapport by explaining purpose of the study, the co-operation required and the anonymity assured before obtaining verbal consent. Initially the demographic tool, self-structured questionnaire, administered to the sample to know existing level of knowledge regarding NABH. After pre-test, awareness programme was conducted on NABH Criteria. Post test was a week by using the same structured knowledge questionnaire to assess the effectiveness of the awareness programme among health care workers.

### III. FINDINGS

The analysis of the data collected from 287 HCWs working in a tertiary care hospital. Descriptive and inferential statistics both were used to analyzed the data. It is found that post-test knowledge score is higher than pre-test score. So, it indicates effective outcome of awareness programme on NABH accreditation.

Distribution of mean SD and percentage of pre-test& post-test knowledge score of health care workers:

**n=287**

Sr. No	Knowledge Score	Maximum Questions	Mean	Mean percentage	SD
1.	Pre-test scores	30	11.85	39.50%	3.63
2.	Post-test score	30	22.64	75.56%	4.15

A total of 287 Health care workers were included in the final study for analysis. The mean score of the pre-test was 11.85 and the post-test score was 22.64.

Distributions of Pre-test knowledge score of Health care workers:

**n=287**

Sr. No.	Score	Knowledge level	Frequency	Percentage
1	0%-33%	Poor	164	57.14%
2	34%-66%	Average	100	34.84%
3	66%-100%	Good	23	8.01%

The result pertaining to knowledge revealed that 57.14% of the samples had poor, 34.84% had average and 8.01% of them had good knowledge. It is found that the knowledge level is Poor in Health care workers.

**Distributions of Post-test knowledge score of Health care workers:**

**n=287**

Sr. No.	Score	Knowledge level	Frequency	Percentage
1.	0-10	Poor	00	00%
2.	11-20	Average	67	23.34%
3.	21-30	Good	220	76.65%

The result pertaining to knowledge revealed that 0% of the samples had poor, 23.34% had average and 76.65% of them had good knowledge. It is found that the knowledge level is good in Health care workers after providing awareness programme.

**Comparison of pre-test and post-test knowledge score:**

**n=287**

Variable	Test	Mean	Mean Difference	Std. Deviation	t- Value 't' value
Knowledge regarding NABH accreditation	Pre-test	11.85	10.82	3.63	34.24
	Post-Test	22.67		4.15	

The mean score of the pre-test was 11.85 and the post-test score was 22.64, the mean difference between pre-test and post-test was 10.82, Standard deviation of pre-test was 3.63 and post-test was 4.15, and the 't' value was 34.24.

**IV. DISCUSSION**

Similar study conducted by Gentile S. et al. on accreditation knowledge acquired by personal in the Marseille hospital, the result demonstrate that the knowledge about accreditation seems to be well integrated, with only 7 of the professionals being unaware of the accreditation programme and 58% of them associating the accreditation process with an administrative procedure. The level of overall knowledge is greater in more highly trained personnel ( $p < 0.05$ ), but there was a poor level of knowledge regarding the internal organization structures that existed.<sup>6</sup>

One more similar study on knowledge and awareness of standard precaution among health care workers at Nizam's Institute of Medical Sciences, Hyderabad conducted by Mudedla, STEj, WL Reddy, et,al, with the aim was to assess the knowledge and awareness of standard precautions among health care workers that is doctors, nurses and technicians. It was observed that 96 (53.3%) respondents are very knowledgeable. And 84(46.7%) were somewhat knowledgeable.<sup>7</sup>Kavita Sanjay Kapur, Sandhya et al., conducted a study "to assess the effectiveness of plan teaching programme on national accreditation board for hospital and health care providers guidelines among newly recruited staff nurse at Krishna hospital Karad". This was improvement of service quality in health care unit has become a prime consideration to ensure patient satisfaction across the world in the modern economic scenario, It evaluator survey approach was considered study design was used one group purposive sampling technique, 51 newly recruited staff nurses at Krishna hospital, study concluded majority of newly recruited nursing staff having 19.38% average knowledge and 17.855% having average practice towards NABH guidelines.<sup>8</sup>Indra mani, anithavictoria, et al., conducted a relevant study to identify among 300 staff nurses were selected through non-probability convenience sampling method, both descriptive and inferential statistics, their knowledge and attitude

score was computed and there is an association between the level of knowledge (chi-square (2) = 5.59,  $p > 0.05$ ) and attitude (chi-square (1) = 3.84,  $p > 0.05$ ) with their selected personal variables like educational qualification.<sup>9</sup> According to Gangadharan,<sup>10</sup> In the age of globalization and liberalization, India has achieved certain growth in its economy by increasing the standard of living of people, which increases the consumers expectation on the quality in healthcare service (Pahuja and Vohra, 2012, Kumaraswamy, 2012).<sup>11</sup> In present situation, continuous improvement of quality of healthcare becomes much important for any healthcare providers by improving infrastructure with technological, According to Purbey et al. (2006), the healthcare sector is the fastest and largest growing sector in India, In the present socio-economic environment, patients in India are aware of their rights as consumers of health services and demand quality healthcare. In this context, all the healthcare providers should have closer look at the perception of their patients and provide quality healthcare to meet up their expectation (Itumalla, 2012).<sup>11</sup> Sharma and Narang (2011).<sup>12</sup> in their study, found that with the improvement of income and education of Indian people, their expectation for quality healthcare service has also been increasing. Therefore, it is primary task of all the healthcare providers in India to provide quality medical service to their Patients.

This finding was supported by a study conducted at a University Hospital in Sweden, among 443 participants in the study. A two-day training program about quality improvement was performed on seven different occasions and participants were encouraged to translate their newly acquired knowledge into improvement of projects. Surveys on attitudes toward improvement work was completed by the participants right before the training and six months afterwards and showed significant changes in attitude among the participants.<sup>13</sup>

The influence of experience was observed in a similar study, in which differences were observed in groups of participants in Sweden, undergoing a two-day training program about quality improvement based on their profession and the number of years in their current position.<sup>14</sup> Thus, it may be concluded that experienced nurses with higher qualification may be more competent in quality assurance activities.

The present study aim to identify Assess the existing level of knowledge on criteria of NABH. Among health care workers in includes Doctors, Nurses, Physiotherapist, Paramedical staff, Administrative staff. First objectives of the study were Assess the existing level of knowledge on criteria of NABH, A second objective was Assess the effectiveness of awareness program on criteria of NABH. And third objectives was Find out the association between demographic data with pretest knowledge score.

The result of the present study show that (57.14%) health care workers had poor knowledge, (34.85%) having average knowledge & only (8%) in pre-test score and in post test the majority of health care workers having Good knowledge (76.65%) and (23.34%) having average knowledge, none of were in poor group awareness program. So, it indicates effective outcome of awareness programme on NABH accreditation.

## V. CONCLUSION

This study was undertaken to assess the effectiveness and awareness program regarding NABH criteria. Study reveals that the majority of health care workers had (76.65%) good knowledge score, 23.34% health care workers having average knowledge score and 00% health care workers having poor knowledge score.

### ***Ethical Clearance***

This study was conducted after getting approval from Institutional Ethics committee and after obtaining written consents from all subjects.

### ***Conflict of Interest***

The author declares that they have no conflicts of interest.

### ***Finding***

The study is not funded by any external sources and all expenses were borne by the principal investigator.

## **REFERENCES**

- [1] Kudzma EC. Florence Nightingale and healthcare reform. *Nurs Sci Q.* 2006; 19(1):61–64.
- [2] Joseph, B., & Joseph, M. (2016). The health of the healthcare workers. *Indian journal of occupational and environmental medicine*, 20(2), 71–72.
- [3] CEO, NABH, Official website National Accreditation Board for Hospitals.
- [4] General Information On Brochure For NABH Accreditation Programme For CLINICs-Allopathy- Modern Practice of Medicine
- [5] Official website, NABH, <https://nabh.co/BenefitsofAccreditation.aspx>
- [6] Gentil S, Tardieu S, Vignally P, Mendizabal H, Raufaste C, Jouve E et al. Accreditation knowledge acquired by personnel in the Marseille Hospital. *Sante Publique.* 2002 Sep; 14 (3):243-53.
- [7] Azer, S. A., D. M. Dupras, and S. Azer. "Writing for publication in medical education in high impact journals." *Eur Rev Med Pharmacol Sci* 18.19 (2014): 2966-81.
- [8] The Journal of National Accreditation Board for Hospitals & healthcare providers, Medknow publication, National Accred Board Hosp Healthcare Providers.
- [9] Kapurkar KS, Jagadale SA, Babar RV, To assess effectiveness of planned teaching programme on National Accreditation Board for Hospitals and Health care providers (NABH) guidelines among newly recruited staff nurses at Krishna Hospital, Karad, *Journal of Evolution of Medical and Dental Sciences.* 2015 Dec 2; 4(103):16830-4.
- [10] Hussain, M., and AHMAD OMER Babalghith. "Quality of hospital design in healthcare industry: history, benefits and future prospect." *Impact Int. J. Res. Appl. Nat. Soc. Sci* 2 (2014): 61-68.
- [11] Noronha AV, Williams S. A study 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. *International Journal for Advance Research and Development.* 2018;3(4):50-6.
- [12] Shriyan, A. M. R. I. T. A., and A. S. H. V. I. J. Shriyan. "A study on the efficiency of CSSD at a health care center." *TJPRC: Journal of Nursing and Patient Safety & Care (TJPRC: JNPSC)*, 1 (2) (2015): 7-16.
- [13] Gangadharan (2008), Policy Reforms and Healthcare System in Kerala: Constraints and Options, Journal of Health and Development, Vol. 4, No. 1, pp: 195-207
- [14] Osisioma, Hilda, Hope Nzewi, and Ilo Ifechi. "Flexible working hours and employee performance in selected hospitals in Awka Metropolis, Anambra State, Nigeria." *International Journal of Human Resource Management and Research (IJHRMR) Vol 5* (2016): 1-10.
- [15] Itumalla R (2012). Information Technology and Service Quality in Health Care: An Empirical Study of Private Hospital in India, *International Journal of Innovation, Management and Technology*, Vol. 3, No. 4, pp: 433-436.
- [16] Sharma KJ and Narang R (2011). Quality of Healthcare Services in Rural India: The User Perspective, *Vikalpa*, Vol. 36, No. 1, pp: 51-60
- [17] Chandrika, K. B. "Need and intervention of social workers in public health care services and social development." *International Journal of Humanities and Social Sciences* 4.1 (2015): 57-62.
- [18] Kristian S, Henrik E, Attitudes toward quality improvement among healthcare professionals: Lessons from a hospital-wide quality initiative", *International Journal of Quality and Service Sciences*, Vol. 6 Issue: 2/3, pp.203-212,
- [19] Al-Rimawi, Rula, Jafar Alshraideh, and Mahmoud Al-Hussami. "Historical Development of Health Equity: Literature Review." *International Journal of Applied and Natural Sciences (IJANS)* 7.1 (2018).
- [20] Suganya P. Quality Assurance a Key to Success in Nursing: An Overview *International Journal of Health Sciences & Research* (www.ijhsr.org). December 2017. Vol.7; Issue: 12. 238