Perception of Hospital Accreditation Impact among Quality Management Professionals in India: A Survey-Based Multicenter Study

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ABSTRACT

Introduction: Accreditation ensures the standard of healthcare, yet accreditation effects on service quality are much debated. Some perceive it as improving quality and organizational performance, whereas others see it as overly bureaucratic and time-consuming, so adding it has limited advantage. The aim of the present study was to understand the perception of hospital staff working in quality management (i.e., doctors, nurses, and administrators) on accreditation, and determine whether years of accreditation have had any impact on their perception. Methods: This was a cross-sectional, descriptive, data-based study initiated by the Consortium of Accredited Healthcare Organizations. It consisted of primary data obtained in form of responses to a 30-item questionnaire and collected from 415 respondents. A probability (∝) value of less than 0.05 was considered statistically significant. Results: For all 30 items, a significantly greater number of participants had a favorable response (∝, 0.001). A greater number of administrators, as compared with doctors and nurses, responded positively on the impact of accreditation (∝, 0.05). Participants from hospitals with 1–4 years of accreditation, as compared with participants from hospitals with 4–12 years of accreditation, gave a favorable response (∝, 0.05). Conclusion: One of the most important hurdles to implementing accreditation programs is the dilemma of healthcare professionals, especially senior hospital staff, regarding the positive impact of accreditation. The need to educate healthcare professionals about the potential benefits of accreditation, which should resolve any cynical attitude of healthcare professionals towards accreditation, is of utmost importance.

Keywords: hospital accreditation, healthcare services, patient safety, benefits of accreditation

INTRODUCTION

Per the World Health Organization (WHO), increasing patients’ expectations, ensuring the safety of patients and staff, and improving quality have become important objectives for all national health systems in developed and developing countries. The demand for quality in healthcare services has risen due to various market forces such as medical tourism, insurance, corporate growth, and competition. Achieving a high-quality health system is a complicated journey; however, low standards put patients at risk. One WHO study showed that the highest incidence of hospital infections in Southeast Asia is 10%, and in Eastern Mediterranean the incidence is 11.8%, which is the highest.[1] Countries have used distinct approaches and built upon lessons learned along the way. Several wealthy industrialized countries have had measurable success advancing the quality of healthcare provided to their people. In contrast, many developing countries are still endeavoring to identify and implement robust strategies to promote quality healthcare.[2] The expectations of the consumer for best quality has also risen, which has led to the introduction of national and international accreditation bodies to act.
as a quality assurance mechanism, thus enhancing customers’ access to better healthcare services.

Hospital accreditation is an effective way to evaluate the quality of a hospital and an important tool for improving the standards of the hospital. Accreditation is a long-term process that demands commitment of the entire organization. The healthcare professional’s skepticism about the positive impact of accreditation programs is the most important barrier to implementation.

The National Accreditation Board for Hospitals and Healthcare Providers (NABH) defines hospital accreditation as “a public recognition by a national or international healthcare accreditation body, of the achievement of accreditation standards by a healthcare organization, demonstrated through an independent external peer assessment of that organization’s level of performance in relation to the standards.” Hospital accreditation has also been defined as “a self-assessment and external peer assessment process used by healthcare organizations to accurately assess their level of performance, in relation to the established standards and to implement ways to continuously improve.”[3,4] Accreditation is not just about setting standards; there are analytic, counseling, and self-improvement elements to the process.[5] The accreditation bodies existing in India include the International Standards Organization, NABH, Joint Commission International, and National Accreditation Board for Testing and Calibration Laboratories.

These accreditation organizations gauge the regulations, safety guidelines, and practices of the healthcare units.[6] There are several issues that run parallel in evidence-based medicine, quality assurance, and medical ethics. The reduction in medical error is a crucial part of the accreditation process. Hospital accreditation is, therefore, a vital component in the maintenance of patient safety. However, there are few data supporting the effectiveness of accreditation programs.[7]

Accreditation ensures the standard of healthcare, yet accreditation effects on service quality are much debated. Healthcare providers argue that accreditation is rigorous, improves quality, and helps staff organize and strengthen patient safety efforts.[8] One of the factors affecting the implementation of hospital accreditation programs is the acceptance of accreditation standards by hospital staff, in terms of professional and cultural norms across the local region. Collaboration is essential among teaching institutes, hospitals, and universities. Their synergistic role in introducing the concepts of accreditation standards and continuous improvement evoke realization among healthcare experts of the necessity of professional standards that are audited through the accreditation programs.[9]

There is a difference in the perception amongst healthcare professionals about the utility of accreditation. Some perceive it as improving quality and organizational performance, whereas others see it as overly bureaucratic and time-consuming, so adding it has limited advantage.[10,11] Many factors influence such perceptions such as the type of staff member (e.g., doctors, nurses, and administrators),[12] accreditation program, and context.[13] Amongst healthcare managers and administrators, accreditation has been reported as negative, offering little value for its time and cost,[14] and as positive for promoting quality, good practices, and uniting staff by integrated efforts in treatment and quality care.[15] Others pursue it as a marketing tool[16] or a legitimation of their right to intervene in patient care.[17] Perceptions of accreditation amongst healthcare professionals and those in management and administrative roles are likely to influence the success of accreditation programs.[18,19]

Previous literature[20] shows that nursing staff, technicians, and support staff are the most responsive to the constant stimulation of accreditation programs, while medical faculty are slow to embrace the change.

With the above background, this research was initiated to determine the following in the Indian context:

1. Perception of hospital staff (i.e., doctors, nurses, and administrators) on accreditation;
2. Perception of the staff of accredited hospitals on the impact of accreditation; and
3. Whether years of hospital accreditation have had any impact on staff perception.

**METHODS**

This was a cross-sectional, descriptive, and simple random sampling methodology–based study involving primary data obtained from hospital staff of hospitals located in the states as well as the union territories of India. The Consortium of Accredited Healthcare Organizations (CAHO) initiated the study with all the member organizations, which are accredited. The study was conducted over a period of 30 days in June 2019. The study commenced after obtaining the approval from Research Committee of CAHO (RC/002/2018) in November 2018. A simple random sampling technique was used and the data were collected through questionnaire in the form of Google Forms. Informed consent was not required to participate in the survey; answering the questionnaire indicated consent.

The questionnaire adopted in this study was based on review of already published studies and the objective of the current study. Face validity of the questionnaire was done and subsequently pilot tested with 50 respondents. Internal consistency was checked by using a reliability test with the Cronbach $\alpha$ value. It was inferred that 30 items of the questionnaire, that is, the statements with Likert scale options were highly reliable because the Cronbach $\alpha$ is found to be 0.960.

The validated structured questionnaire comprising 30 items was sent by Google Forms to 450 quality team members of the CAHO member organizations. The questionnaire was used to assess the perception of patient safety, culture, and quality of care among the
respondents. The responses were recorded in a 5-point scale from *strongly agree* to *strongly disagree*. For analysis, *strongly agree* and *agree* have been taken as positive responses. Responses that were *neutral*, *disagree*, and *strongly disagree* were taken as negative responses. A total of 415 valid responses were obtained and response rate was 92.22%. Various parameters such as patient education, patient satisfaction, documentation by nurses and doctors, reporting culture, emergency preparedness, facility management, equipment management, waiting times, and patient rights, which impact quality and safety aspects in a hospital, were included in the survey to study the impact of accreditation amongst the doctors, nurses, and administrators.

**Statistical Analysis**

Data were collected and a pie chart was designed with Microsoft Office Excel 2013. Data were analyzed with SPSS version 26.0 (IBM SPSS) for Windows. Descriptive statistics methodology was used to represent the data as frequencies and percentages. The 5-point Likert scale responses were considered as positive, neutral, and negative. Because the study was cross-sectional, the Mann-Whitney *U* test was used to compare the responses of the two groups. A two-tailed probability (*p*) value of less than 0.05 was considered statistically significant.

**RESULTS**

Of 415 valid participants, the highest number of responses was obtained from administrators (54.69%); the profession-wise distribution of participants is shown in Figure 1.

In the present study, respondents were evaluated for their perception regarding the impact of hospital accreditation and patient safety (Table 1). For all 30 items, participants with a favorable response (i.e., *yes*) were significantly greater (*p* < 0.001). Moreover, of 415 participants, 326 (84.5%) responded that overall improvement in quality of healthcare services was a result of accreditation. Hence, the results showed a statistically significant association between the perception of staff regarding hospital accreditation, quality of care, and patient safety.

The response of the participants according to the variation in responses of doctors and nurses versus administrators is depicted in Table 2. For all 30 items, as compared with doctors and nurses, a significantly greater number of administrators (*p* < 0.05) had a favorable response. Their motivation and satisfaction increased, except for item 26 (*p* > 0.05). When the responses were further analyzed by individual groups of doctor and nurse responses, variables like improvement in waiting time, patient rights, medical documentation, nursing documentation, and accountability of staff had a considerable positive response rate of 45% and above when compared with other variables among the total. Simultaneously, when the administrators’ response was analyzed, variables like patient satisfaction, infection control practices, general maintenance of facility, compliance with rules governing occupational health risks, and statutory regulations had a positive response rate among the total variable pool.

The differences in responses with respect to years of hospital accreditation are shown in Table 3. Two groups were studied consisting of 1–4 years versus 4–12 years of hospital accreditation. For all 30 items, as compared with participants with 4–12 years of hospital accreditation, a significantly greater number of participants with 1–4 years of hospital accreditation (*p* < 0.05) had a favorable response except for items 14 and 27 (*p* > 0.05).

**DISCUSSION**

The healthcare industry is one of the most important industries in the service field. Owing to the complex nature and number of stakeholders in healthcare system, healthcare quality is a complex concept as stated by Weheba.[21]

The healthcare industry has undergone transformation from a physician-centered approach to a patient-centered approach, leading to high demand for quality in healthcare services. That change has caused quality assurance mechanisms to intensify and accreditation to be pursued. Accreditation serves as an essential component to achieve technical competence within healthcare organizations in terms of delivering certain standards of healthcare services. In India, factors influencing the growth of hospital accreditation are primarily due to pressure from other organizations on which accreditation is dependent and cultural expectations within the area where the organization functions.

Hence, in the present study various parameters denoting the impact and awareness of hospital accreditation amongst doctors, nurses, and administrators—quality team members—were studied. Most responses were obtained from the administrators (55%).

The present study showed high positive responses for the following: quality of care in the form of patient awareness (85%) and safety (84.8%), enhanced reporting...
Table 1.—Perception of participants on impact of accreditation*

| Variables                                                                 | Yes n (%) | No n (%) | p-Value |
|---------------------------------------------------------------------------|-----------|----------|---------|
| Patient education has improved                                            | 307 (85)  | 54 (15)  | < 0.001 |
| Patient satisfaction has increased                                        | 288 (85)  | 51 (15)  | < 0.001 |
| Improvement is noticed in waiting time                                     | 282 (83.9)| 54 (16.1)| < 0.001 |
| Respect to patients and their rights have improved                        | 304 (84)  | 58 (16)  | < 0.001 |
| Hospital is better prepared to manage emergencies such as fire             | 331 (83.8)| 64 (16.2)| < 0.001 |
| Staff demonstration                                                        | 337 (84.5)| 62 (15.5)| < 0.001 |
| Improvement in patient safety issues                                       | 334 (84.8)| 60 (15.2)| < 0.001 |
| Safety-related equipment                                                   | 338 (84.9)| 60 (15.1)| < 0.001 |
| Staff awareness on reporting incidents’ safety issues                      | 315 (84)  | 60 (16)  | < 0.001 |
| Infection control practices are better                                     | 327 (83.8)| 63 (16.2)| < 0.001 |
| Cleanliness has improved                                                   | 317 (85)  | 56 (15)  | < 0.001 |
| General maintenance of facility has improved                               | 319 (83.9)| 61 (16.1)| < 0.001 |
| Biomedical waste segregation has improved                                  | 330 (83.5)| 65 (16.5)| < 0.001 |
| Improvement in medical documentation by clinicians                        | 287 (83.9)| 55 (16.1)| < 0.001 |
| Enhancement in nursing documentation is observed                           | 320 (84.2)| 60 (15.8)| < 0.001 |
| Functioning and management of lab have improved                            | 318 (85.3)| 55 (14.7)| < 0.001 |
| Management of equipment has improved                                       | 322 (85.6)| 54 (14.4)| < 0.001 |
| Signage has improved in the hospital                                       | 338 (84.5)| 62 (15.5)| < 0.001 |
| There is improvement in awareness of doctors on clinical policies          | 266 (83.6)| 52 (16.4)| < 0.001 |
| There is improvement in awareness of nurses on nursing policies           | 329 (84.1)| 62 (15.9)| < 0.001 |
| There is improvement in awareness of support staff on hospital policies    | 315 (84.5)| 58 (15.5)| < 0.001 |
| Staff awareness of and compliance with rules governing occupational health risks have improved | 300 (84.7)| 54 (15.3)| < 0.001 |
| Roles, responsibilities of staff are well defined                          | 309 (84.9)| 55 (15.1)| < 0.001 |
| Accountability of staff has increased                                      | 300 (84.5)| 55 (15.5)| < 0.001 |
| There is improvement in the coordination between departments               | 291 (85.3)| 50 (14.7)| < 0.001 |
| Staff motivation and satisfaction have increased                           | 247 (85.2)| 43 (14.8)| < 0.001 |
| Key performance indicators are captured and have shown improvement         | 312 (85.5)| 53 (14.5)| < 0.001 |
| Decision-making is based on evidence and data                              | 297 (85.3)| 51 (14.7)| < 0.001 |
| Compliance with government norms and statutory regulations have improved   | 333 (84.3)| 62 (15.7)| < 0.001 |
| Overall quality of care has improved                                       | 326 (84.5)| 60 (15.5)| < 0.001 |

*In the reliability test, the Cronbach value is 0.960.

and documentation (84.2%), good infection control (83.8%) and cleanliness (85%), improved coordination between various departments (85.3%), satisfaction of the hospital staff (85.2%), and overall improvement in the quality of hospital care (84.5%). These findings are consistent with those observed by Andres et al.[22] A study by Poland[23] reported that ambulatory facilities have experienced significant changes in life safety requirements and focuses on usefulness of documentation in improving hospital accreditation. Ghareeb et al.[24] investigated how accreditation helped introduce organizational changes by promoting organizational learning and quality improvement initiatives evaluating seven components, namely leadership, information and analysis, strategic quality planning, human resources utilization, quality management, quality results, and customer satisfaction. They found very high scores ranging between 3.67 and 4.03, signifying positive patient satisfaction. In another study by Rajalatchumi et al.,[25] the total composite positive perception of patient safety culture among the healthcare professionals at their institute was found to be 58%. A study by El-Jardali et al.[26] reported that by introducing new quality standards and reinforcing existing ones, such as infection control, occupational safety, waste and fire management, and incident and accident reporting, centers were able to translate the notions of quality into tangible outcomes that could be measured and compared with other centers, both nationally and internationally.

The study showed an average positive response among doctors and nurses (44.1%) and was highest among administrators (55.9%). As compared with doctors and nurses, a significantly larger number of administrators ($p < 0.05$) had a positive response. However, no statistical difference was observed in responses related to improvement of staff motivation and satisfaction between the two groups ($p = 0.055$). Contrary to the findings of the present study, Listyowardjo et al.[27] reported a more positive response amongst the doctors. Additionally, Diab[28] reported an equal positive attitude towards accreditation among doctors (average mean $= 4.12$) and nurses (average mean $= 4.10$) in hospitals in Jordan. This is an interesting finding because the respondents were all involved in quality management from different backgrounds. It is possible that the doctors and nurses in quality management have a more stringent outlook on these requirements than the administrators who may not have a medical background. It is also possible that the positive response reported among administrators is the result of the inbuilt system developed by the organization that includes regular supervision and management of various issues by administrators who,
overall quality of care has improved 170 (44.1) 216 (55.9) 0.001
Compliance with government norms and statutory regulations have improved 172 (43.5) 223 (56.5)
Decision-making is based on evidence and data 151 (43.4) 197 (56.6) 0.001
Key performance indicators are captured and have shown improvement 159 (43.6) 206 (56.4) 0.001
Staff motivation and satisfaction have increased 133 (46) 157 (54) 0.01
There is improvement in awareness of support staff on hospital policies 160 (43) 213 (57) < 0.001
There is improvement in awareness of nurses on nursing policies 173 (44.2) 218 (55.8) 0.001
There is improvement in awareness of doctors on clinical policies 140 (44) 178 (56) 0.002
Accountability of staff has increased 159 (49.9) 196 (56.1) 0.007
There is improvement in the coordination between departments 150 (43.9) 191 (56.1) 0.002
Staff motivation and satisfaction have increased 133 (46) 157 (54) 0.05*
Key performance indicators are captured and have shown improvement 159 (43.6) 206 (56.4) 0.001
Decision-making is based on evidence and data 151 (43.4) 197 (56.6) 0.001
Compliance with government norms and statutory regulations have improved 172 (43.5) 223 (56.5) < 0.001
Overall quality of care has improved 170 (44.1) 216 (55.9) 0.001

*p-value statistically not significant.

although the present study was a multi-institutional study, it lacked comparison between small, medium, or large-sized hospitals. Moreover, patient satisfaction before and after accreditation was not evaluated. The respondents are doctors, nurses, and administrators working in quality teams of hospitals and not the practicing clinicians, nurses, and operations managers, which adds to the bias in understanding the actual feedback from the practitioners. Thus, further studies are required to evaluate these factors.

**Conclusion**

The present study concludes that accreditation is vital to ensure disciplined hospital management and to impart quality care and patient safety. It included various parameters related to patient satisfaction, staff awareness and responsibilities, coordinated work, infection control practices and cleanliness, documentation, infrastructure care and management (eg, laboratory, equipment). The results indicate that accreditation has had an impact on hospitals in improvements.

One of the most important hurdles to implementing various accreditation programs is the dilemma of healthcare professionals, especially senior hospital staff, regard-
ing the positive impact of accreditation programs on the quality of healthcare services. This can be overcome by involving them in accreditation programs and providing them with evidence-based literature. However, the need to educate healthcare professionals about the potential benefits of accreditation, which should resolve any cynical attitude of healthcare professionals towards accreditation, is of utmost importance.

References

1. Dewi Agustine E Pujiyanto. Healthcare professional’s perception towards impact of hospital Accreditation on Quality of Care in Asia: a systematic review. Indian J Public Health Res Dev. 2020;2. DOI: 10.5958/0976-5506.2019.00621.1.
2. Farrag A, Harris Y. A discussion of the United States’ and Egypt’s health care quality improvement efforts. Int J Healthc Manag. 2019;3. DOI: 10.1080/20479700.2019.1620454.
3. ISQua - The International Society for Quality in Health Care. International Society for Quality in Healthcare (ISQua). 2019. Accessed Dec 15, 2019. www.isqua.org/
4. Tregloan ML. Health service quality assessment: defining and assessing health care standards; an international picture. Healthcare Review. 2000.
5. Jafari H, Raesi AR, Yarmohammadian MH, et al. Developing and validating a checklist for accreditation in leadership and management of hospitals in Iran. J Educ Health Promot. 2018;7:136.
6. Nayak T. Impact of Quality of Work Life on Turnover Intention: A Study on Private Health Care Units in Odisha [doctoral dissertation]. Odisha, India: National Institute of Technology, Rourkela; 2016.
7. Hinchcliff R, Greenfield D, Moldovan M, et al. Narrative synthesis of health service accreditation literature. BMJ Qual Saf. 2012:1:979–991.
8. What is accreditation. The Joint Commission. 2019. Accessed Dec 17, 2019. www.jointcommission.org/accreditation/accreditation_main.aspx
9. Nicklin W. The value and impact of health care accreditation: a literature review. Accreditation Canada. Updated Oct 2013. adventa.org/pdfs/valueimpactaccreditation.pdf
10. Hinchcliff R, Greenfield D, Westbrook JI, et al. Stakeholder perspectives on implementing accreditation programs: a qualitative study of enabling factors. BMC Health Serv Res. 2013;13:437.
11. Greenfield D, Brathwaite J. Health sector accreditation research: a systematic review. Int J Qual Health Care. 2008;20:172–183.
12. Alkhnenizan A, Shaw C. The attitude of health care professionals towards accreditation: a systematic review of the literature. J Fam Community Med. 2012;19:74–80.
13. Ehlers LH, Jensen MB, Simonsen KB, et al. Attitudes towards accreditation among hospital employees in Den-
14. Fairbrother G, Gleeson M. EQuIP accreditation: feedback from a Sydney teaching hospital. *Aust Health Rev*. 2000;23:153–162.
15. Hurst K. The nature and value of small and community hospital accreditation. *Int J Qual Health Care*. 1997;10:94–106.
16. Nandraj S, Khot A, Menon S, et al. A stakeholder approach towards hospital accreditation in India. *Health Policy Plan*. 2001;16:70–79.
17. Pomey MP, Contandriopoulos AP, Francois P, et al. Accreditation: a tool for organizational change in hospitals? *Int J Qual Health Care*. 2004;17:113–124.
18. Birken SA, Lee S-YD, Weiner BJ. Uncovering middle managers’ role in healthcare innovation implementation. *Implement Sci*. 2012;7:28.
19. Dastur F. Hospital accreditation: a certificate of proficiency for healthcare institutions. *J Assoc Physicians India*. 2012;60:12–13.
20. Haj-Ali W, Karroum LB, Natafgi N, Kassak K. Exploring the relationship between accreditation and patient satisfaction—the case of selected Lebanese hospitals. *Int J Health Policy Manag*. 2014;3:341–346.
21. Weheba G, Cure L, Toy S. Perceived dimensions of healthcare quality in published research. *Int J Healthc Manag*. 2018;1. DOI: 10.1080/20479700.2018.1548156.
22. Andres EB, Song W, Song W, Johnston JM. Can hospital accreditation enhance patient experience: longitudinal evidence from a Hong Kong hospital patient experience survey. *BMC Health Serv Res*. 2019;19:623.
23. Poland T. A look at challenges facing ambulatory care. *Health Facilities Manag*. 2019;32:10–11.
24. Ghareeb A, Said H, El Zoghbi M. Examining the impact of accreditation on a primary healthcare organization in Qatar. *BMCP Med Educ*. 2018;18:216.
25. Rajalatchumi A, Ravi Kumar TS, Muruganandham K, et al. Perception of patient safety culture among health-care providers in a tertiary care hospital, South India. *J Nat Sci Biol Med*. 2018;9:14.
26. El-Jardali F, Hemadeh R, Jaafar M, et al. The impact of accreditation of primary healthcare centers: successes, challenges and policy implications as perceived by healthcare providers and directors in Lebanon. *BMCP Health Serv Res*. 2014;14:86.
27. Listyowardojo TA, Nap RE, Johnson A. Variations in hospital worker perceptions of safety culture. *Int J Qual Health Care*. 2012;24:9–15.
28. Diab SM. The extent to which Jordanian doctors and nurses perceive the accreditation in private hospitals. *Int J Mark Stud*. 2011;3:78.
29. Ehlers LH, Jensen MB, Simonsen KB, et al. Attitudes towards accreditation among hospital employees in Denmark: a cross-sectional survey. *Int J Quality Health Care*. 2017;29:693–698.
30. Campbell SM, Sheaff R, Sibbald B. Implementing clinical governance in English primary care groups/trusts: reconciling quality improvement and quality assurance. *Qual Saf Health Care*. 2002;11:9–14.