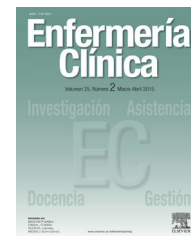




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Impact of hospital accreditation on quality of care: A literature review[☆]



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KEYWORDS

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Abstract

Objective: To review and analyze the impact of hospital accreditation on quality of care.

Method: We reviewed articles of the hospital accreditation impact on quality of care which had been published in English and Indonesian from 2008 to 2018. Comprehensive searches were conducted in the online databases of ProQuest, CINAHL and ScienceDirect.

Results: A total of 11 articles were reviewed. We found that the hospital accreditation impacted the quality of care through improved quality of management (81.81%), improved employee participation (27.27%), and improved quality of results (54.54%). The articles studied nurses and other health workers with consideration on their work experience, education, and age.

Conclusions: Hospital accreditation has positive impact in improving the quality of services provided in the hospitals. The greatest impact was reflected by the hospitals that had been accredited by the Joint Commission International. The perceptions on which the studies were based came from various health care personnel and were not limited to professional nurses. Therefore, further research is needed to understand the impact of accreditation on the quality of care from the nurses' perception.

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Introduction

Hospital Accreditation is a standard compliance assessment process conducted by an independent institution from within or outside the country. In Indonesia, the gold standard

of hospital Accreditation as mandated by the Indonesian Ministry of Health is the accreditation carried out by the Joint Commission International (JCI). JCI is an United States based-international institution which was established in 1951.¹ This institution has been conducting the task of establishing and evaluating the performance standards of health care providers through its accreditation. However, since 1995, Indonesia has set up the national accreditation standards and in January 2018 had the 1st edition of the National Hospital accreditation standard.² Indonesian Hospital Accreditation Commission is an independent institution in Indonesia that examines the functional and non-structural

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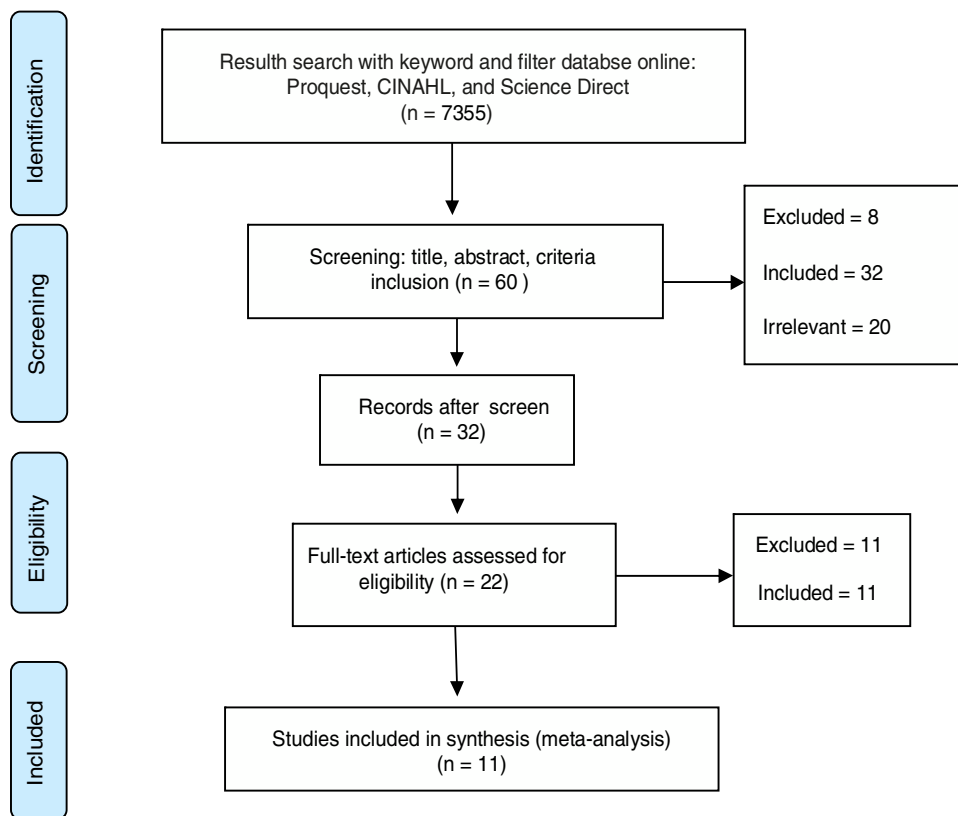


Figure 1 Process selection of study.

elements of the hospitals. Hospitals that have been accredited will get recognition from the Government as they have met the service and management standards. The government grants licenses to the institutions appointed to conduct checks for health services including health care.

Quality of care is essential to be maintained and improved in order to reduce mortality.¹ According to World Health Organization (WHO), the quality of health care services provided to patients and families will improve health. To achieve this, health care must be safe, effective, timely, efficient, fair, and people-centered.³ Quality of care is also an important component in the universal health coverage. Previous research by Alkhenizan and Shaw found that the accreditation might have a broad impact not only related to the quality of care.⁴ This study aimed to review and analyze the impact of hospital accreditation on the quality of care.

Method

We did a literature review of articles published in English and Indonesian between the years 2008 and 2018. A comprehensive article search was carried out through the online databases of ProQuest, CINAHL, and Science Direct. The inclusion criteria were: (1) discussing the impact of accreditation on the quality of care, (2) evaluating the impact of hospital accreditation on quality of care, and (3) Design of Study: quantitative, qualitative. While the exclusion criteria were: (1) abstract-only articles, (2) only evaluating the accreditation program, (3) only evaluating one subspecialty/specialty, e.g. only evaluate

diabetics program, (4) written in other languages than Indonesian and English.

We searched for articles using the keywords: "impact accreditation hospital" and "quality of care." Initially, there were 31.695 articles on ProQuest, 169 articles on CINAHL, and 21.879 articles on Science Direct. A total of 7.355 articles were screened and 11 articles met the inclusion criteria of the review. The detailed article selection process is summarized in Fig. 1 and Table 1.

Results

Description of the studies

Of the 11 articles included in the review, the largest number of articles was from Saudi Arabia and Denmark (18.18%). Other studies were conducted in Norway, the United States, Lebanon, Turkey, Canada, Iran, the United Kingdom, and the Netherlands. 36.36% of the studies used cross-sectional design and 27.27% were qualitative studies. Of the studies investigated, 27.27% were conducted with professional nurses only, while 54.54% had other healthcare providers, including physicians, medical technologists, dietitians, and other allied healthcare professionals. 90.9% of the hospitals had been JCI-accredited, and the rest (9.09%) was accredited nationally. The range of accreditation licenses is summarized in Table 2. Four of the studies had the same title, variables, and type of sample, but they had different designs and places of research.^{4,5,6,7} These four articles

Table 1 Detailed result selection of study.

Item	Proquest	CINAHL	Science direct	Total
<i>General Keywords (impact accreditation hospital)</i>	31,695	169	21,879	53,743
<i>Specific Keywords (impact accreditation hospital and quality of care) the filter by years and language</i>	2273	57	5025	7355
<i>Duplication</i>		3		
<i>Screening by title and abstract</i>	30	15	15	60
Excluded	3	3	2	8
Deleted because irrelevant	20	0	0	20
Included	7	12	13	32
<i>Screening by full text eligibility</i>	7	7	8	22
Excluded	2	1	7	10
Included	3	7	1	11
<i>Reviews</i>	3	7	1	11

appeared to replicate their research, but each study had different results.

The results of the data were grouped according to sub-themes, then categorized into a theme. The results of the analysis yielded several categories of the impact of accreditation on the quality of care, i.e. the quality of management, employee participation, and quality of results (Table 3). The impact of accreditation on the quality of care in a hospital showed the largest evidence in the quality of its management (81.81%) (Table 3). The impact was classified according to the study design of the articles. Details of the study designs are provided in Table 4.

Quality of management

Accreditation assessment surveys provide an opportunity for organizations to make changes and to improve the quality of their services. Changes include every aspect of routine assessment and they are shown to have a positive impact on improving the quality of management. Based on the analysis of the 11 articles, the quality of management is the largest benefit of hospital accreditation (81.81%). The results of the review also identified impact on leadership, commitment, support, quality of planning strategy, human resource utilization, and analysis in addition to the performance of the management system.

Employee participation

Employees hold an important role in preparing for accreditation (27.27%) and contributing to changes during implementation. Ten articles stated that it is the nursing profession that responds most to accreditation, followed by the physicians. The responses of employees toward accreditation revealed differences as identified by the nurses, doctors, and other healthcare workers as they implemented the improvements of the quality of care.⁵ Furthermore, with regards to the employees' perceptions on the

Table 2 Characteristics of study (n = 11).

Characteristics	n	%
<i>Countries</i>	11	100%
Saudi Arabia	2	18.18%
Denmark	2	18.18%
USA	1	9.09%
Lebanon	1	9.09%
Turkey	1	9.09%
Iran	1	9.09%
United Kingdom	1	9.09%
Netherland	1	9.09%
Canada	1	9.09%
<i>Designs of study</i>	11	100%
Qualitative	3	27.27%
Cross-sectional	4	36.36%
The case of control retrospective	1	9.09%
Longitudinal, Nationwide study	2	18.18%
Mix method	1	9.09%
<i>Sample</i>	11	100%
Nurses	3	27.27%
Healthcare provides	6	54.54%
Clinical and non clinical staf	2	18.18%
<i>Accreditation</i>	11	100%
Joint Comission International	10	90.9%
National lisencc of accreditation	1	9.09%

implementation of change after completing the hospital accreditation, there were three subcategories that we identified in the reviewed articles: "maintaining the quality care after accreditation," "improving the quality of care management," and "improving the quality of care."

Table 3 Impact accreditation in quality of care ($n = 11$).

Impact	<i>n</i>	%
<i>Quality of management:</i>	9	81.81%
1. Leadership, commitment, and support		
2. Strategy quality of planning		
3. Human resources utilization		
4. Measurement and analysis		
5. Performance management system		
<i>Employee participation:</i>	3	27.27%
1. Involvement in change implementation continuing maintenance quality after accreditation		
2. Involvement manager in improving quality of care		
3. Feeling to include improving quality of care		
4. Enthusiasm for improving quality of care		
<i>Quality of result:</i>	6	54.54%
1. Improvement in the quality of customer satisfaction		
2. Improvement in the quality of service provided by the administration		
3. Improvement in the quality of care provided to the patient		
4. Improvement in the quality of service provided by the clinical support		
5. Improvement in patient safety		

Quality of result

All articles included items related to improvement in the quality of customer satisfaction, improvement in the quality of administrative services, improvement in the quality of clinical support, and improvement in patient safety. In this study, the impact of the accreditation on the quality of results was amounted to 54.54%. This shows that the hospitals respond positively to accreditation by improving the quality of their results to get the best possible assessment result from the survey.

Discussion

The findings of studies in this review consistently indicate that the accreditation has a positive impact on the quality of care ($n = 11$). Jardali's research found that the benefits of accreditation are revealed as improved teamwork and productivity.⁸ Jardali also identified the quality improvement in the components of leadership, commitment, and support.⁸ In addition, the hospitals showed improvements in the quality of their operational performance and supply. These were evaluated through the assessments of nurses regarding the quality of results.⁴ In relation to measurement and analysis, most staff agreed that the hospitals had taken measures to improve the quality of the information. Information quality was identified through effective communication and appropriate information retrieval. It is thus a measurement of the effectiveness of the organization and of the nursing service.⁹

It was agreed that accreditation compelled a hospital to improve utilization of its internal resources, with an improvement of around 62.2%.⁷ Regarding the quality of planning and strategy, employees were given training on how to identify and act on quality improvement opportunities.

The staff agreed that the hospitals encouraged employees to measure and keep records of quality.⁷

Improved quality management involved employees' participation in the accreditation process. This review found that the impact of accreditation on employee participation was 38.6%, and ten articles stated that the most critical roles were those of nurses and doctors. The differences in participation were affected by the motivation of the employees to contribute to the quality improvement of the hospital. Their involvement depended on the role of the participants in ensuring the exercise of standards. Afghani mentioned that differences in response to accreditation from various health professions were affected by enthusiasm, time of accreditation, length of employment, age, gender, workplace, and work climate.⁵ Most participants want to be involved in accreditation as they believed the hospital accreditation could bring positive impacts. In Almasabi's study, employee participation consistently improved the quality of strategic planning, and 64.6% of staff ($n = 422$) agreed that each department and workgroup within the hospital should maintain its specific goals toward improved quality.⁷ Improving the quality of hospitals also required the involvement of nurse managers in carrying out the monitoring of quality. Sri Arini's research showed a positive relationship between the supervisory function and the implementation of supervision, which indicated that increased supervisory function was in line with increased supervision in the nursing services. Supervision is a form of involvement by supervisors in quality control functions.¹⁰

The study results show that 61.5% of the articles indicate that accreditation has an impact on the quality of results. This is relevant to Yildiz's research, which showed that several years after accreditation there was still a steady increase in the quality of results, with measurable improvements in the quality of care provided to patients (medical, surgical, obstetric, and pediatric patients).⁴ The hospitals

Table 4 Classification based on design study ($n = 11$).

Impact	Cross-sectional	Case control Retrospektif	Mix method	Longitudinal nationwide study (quantitative)	Qualitative	Total
<i>Quality of management</i> ^{1,2,4,5,7,8,11,12,13,14,15} : 1. Leadership, commitment, and support 2. Strategy quality of planning 3. Human resources utilization 4. Measurement and analysis 5. Performance management system	4	0	1	1	3	8
<i>Employee participation</i> ^{4,5,7,8,15} : 1. Involvement in change implementation continuing maintenance quality after accreditation 2. Involvement manager in improving quality of care 3. Feeling to include improving quality of care 4. Enthusiasm for improving quality of care	3	0	1	0	1	5
<i>Quality of result</i> ^{4,5,6,7,8,12,16,17} : 1. Improvement in the quality of customer satisfaction 2. Improvement in the quality of service provided by the administration 3. Improvement in the quality of care provided to the patient 4. Improvement in the quality of service provided by the clinical support 5. Improvement in patient safety	4	1	1	1	1	8

had also shown steady improvement in the quality of services provided by the administration (finance, human resources, etc.).⁴ The correlation analysis showed a significant and positive relationship between patient satisfaction and quality improvement.^{4,7} Changes in quality improvement were perceived differently depending on the length of employment, age, and educational background.⁷ According to El-Jardali, the impact of these results on quality was mostly palpable in medium-sized hospitals, with an increase of 0.40 ($p < 0.001$). This suggests that medium-sized hospitals are more responsive to the identification of needs for improved quality, such as creating new policies and procedures, designing new services, or checking and maintaining equipment, all of which can contribute to improved quality results.⁸

Quality of results includes a measure of patient safety. Melo identified issues that gained further attention as a result of the accreditation process. These included a greater focus on developing cross-departmental strategies to prevent patient falls, such as checking the hospital's physical structure to improve the accessibility for patients. In

addition, there were symbols providing information about hazards or anything that posed a risk for the patients.⁶ Patient safety was also provided through nursing practices and other health care services, for example, increasing the number of written procedures and the development of a formal performance management system were both considered to have positively affected day-to-day clinical practice. Moreover, effective communication and improvements in cross-department communication could also affect the quality of outcomes for patients and improve satisfaction and patient experiences.⁶

The impact of accreditation on quality of care can be divided into three categories: the quality of management, employee participation, and quality of results. The most significant impact of the hospital accreditation was in the quality of management, followed by the quality of results, and finally employee participation. Most research results showed that accreditation had a positive impact on improving the quality of hospitals. The results of this review found that the greatest impact of accreditation was evident in

the JCI accredited institutions and with only one nationally-accredited institution. These results are reinforced by most of the health care professional studies. Further research need to examine the impact of hospital accreditation on the quality of nursing care.

Conflict of interests

The authors declare no conflict of interest.

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References

- Alkhenizan A, Shaw C. Impact of accreditation on the quality of healthcare services: a systematic review of the literature. *Ann Saudi Med.* 2011;31:407–17, <http://dx.doi.org/10.4103/0256-4947.83204>.
- NAC. National hospital accreditation of standard. 1st ed. Jakarta: National accreditation commission (NAC); 2017.
- World Health Organization. *Quality of care: a process for making strategic choices in health systems.* Geneva: WHO; 2006.
- Yildiz A, Kaya S. Perceptions of nurses on the impact of accreditation on quality of care A survey in a hospital in Turkey. *Clin Governance; An Int J.* 2014;19:69–82, <http://dx.doi.org/10.1108/CGIJ-07-2013-0021>.
- Algahtani H, Aldarmahi A, Manlangit J Jr, Shirah B. Perception of hospital accreditation among health professionals in Saudi Arabia. *Ann Saudi Med.* 2017;37:326–33, <http://dx.doi.org/10.5144/0256-4947.2017.326>.
- Melo S. The impact of accreditation on healthcare quality improvement: a qualitative case study. *J Health Organ Manag.* 2014;30:1242–58, <http://dx.doi.org/10.1108/JHOM-01-2016-0021>.
- Almasabi M, Thomas S. The impact of Saudi hospital accreditation on quality of care: a mixed methods study. *Int J Health Plan Manag.* 2017;32:e261–78, <http://dx.doi.org/10.1002/hpm.2373>.
- El-jardali F, Jamal D, Dimassi H, Ammar W, Tchaghchaghian V. The impact of hospital accreditation on quality of care: perception of Lebanese nurses. *Int J Qual Heal Care.* 2008;20:363–71, <http://dx.doi.org/10.1093/intqhc/mzn023>.
- Ridwan R, Irawati D, Hastono SP. Efektivitas Organisasi pelayanan Keperawatan Berdasarkan Komunikasi, Pengambilan Keputusan Sosialisasi Karir, dan Jenjang Karir. *J Keperawatan Indones.* 2010;13:1–7, <http://dx.doi.org/10.7454/jki.v13i1.223>.
- Saw R, Yetti K. Improved supervision by supervisor through supervision of the nursing field. *J Keperawatan Indones.* 2008;12:161–7, <http://dx.doi.org/10.7454/jki.v12i3.216>.
- Brubakk K, Vist GE, Bukholm G, Barach P, Tjomsland O. A systematic review of hospital accreditation: the challenges of measuring complex intervention effects. *BMC Health Serv Res.* 2015, <http://dx.doi.org/10.1186/s12913-015-0933-x>.
- Jaggi P, Tomlinson R, Bullard MJ. Nursing duties and accreditation standards and their impacts: the nursing perspective. *Appl Nurs Res.* 2018;40:61–7, <http://dx.doi.org/10.1016/j.apnr.2017.12.009>. Elsevier.
- Moghadam MN, Iranemansh M, Iranmanesh M. Hospital accreditation in Iran: a qualitative case study of Kerman hospitals. *Int J Heal Plan Manag.* 2018;33:426–33, <http://dx.doi.org/10.1002/hpm.2480>.
- Bogh SBIE, Falstie-jensen AM, Hollnagel E, Holst R, Braithwaite J, Johnsen SP. Improvement in quality of hospital care during accreditation: a nationwide stepped-wedge study. *Int J Qual Heal Care.* 2016;28:715–20, <http://dx.doi.org/10.1093/intqhc/mzw099>.
- Elvira Nouwens J, van LMW. Determinants of impact of a practice accreditation program in primary care: a qualitative study. *BMC Fam Pract [Internet].* 2015;16:1–9, <http://dx.doi.org/10.1186/s12875-015-0294-x>.
- Halasa YA, Zeng W, Chappy E, Shepard DS. Value and impact of international hospital accreditation: a case study from Jordan. *East Mediterr Heal J.* 2015;21(2.).
- Bogh SBIE, Falstie-jensen AM, Hollnagel E, Holst R, Braithwaite J, Raben DC, et al. Predictors of the effectiveness of accreditation on hospital performance: a nationwide stepped- wedge study. *Int J Qual Heal Care.* 2017;29:477–83, <http://dx.doi.org/10.1093/intqhc/mzx052>.