

EFFECT OF HOSPITAL ACCREDITATION ON PATIENT SAFETY CULTURE AND SATISFACTION: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Hospital accreditation is carried out to improve the quality of hospital services and patient safety. This study aimed to statistically review the effect of hospital accreditation on patient safety culture and satisfaction.

Subjects and Methods: A systematic review was conducted through articles searching. Four electronic databases namely PubMed, ProQuest, Scopus, and EBSCO were used in this study. The keywords were "hospital accreditation", "patient safety culture", "patient satisfaction", "improving", and "impact". The inclusion criteria in this study were articles in the span of ten years of publication, and using English. The articles were selected by PRISMA flow diagram.

Results: Ten journal reported that accreditation had a significant influence on patient safety culture. There was difference in patient satisfaction among accredited and non-accredited hospitals, but it was not statistically significant. Two articles mentioned that patient satisfaction was driven by hospital physical facilities. Patient safety culture after hospital accreditation was associated with commitment and support from all hospital staff and leadership. Service quality and patient satisfaction were associated with ongoing evaluation of the accreditation implementation.

Conclusion: Hospital accreditation has an effect on patient safety culture and satisfaction. Improving patient safety culture after hospital accreditation requires commitment and support from all hospital staff and leadership. Ongoing evaluation of the accreditation implementation needs to be carried out to improve service quality and patient satisfaction.

Keywords: accreditation, patient safety, culture, patient satisfaction, hospital

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BACKGROUND

Accreditation is a learning process and continuous quality improvement in maintaining the quality of services of patient health with a predetermined standard (Al-Awa et al., 2012). One of the efforts carried out by countries around the world in improving performance are through accreditation, because it is an influential mechanism for assessing the performance of health care organizations (Pomey et al., 2010, Jaafaripooyan et al., 2011).

Accreditation is considered a key component and prioritizes patient safety and quality of service. In addition, accreditation is useful for improving risk management,

providing patient safety culture in hospitals, controlling costs, making management effective, and building initiative in term of patient safety from organizations that participate in accreditation. Achieving accreditation is a strong statement to show the public about the organization's efforts to provide the highest quality service. (Marzban et al., 2017; Sack et al., 2011).

Nowadays, international accreditation organizations require assessing patient safety culture to identify strengths and weaknesses of patient safety culture, evaluating employees in teamwork, management and leadership that support patient safety, frequency of incident reporting, and identifying existing

patient safety culture problems (Deilkås and Hofoss, 2008; El-Jardali et al., 2011).

The truth of the statement of “hospital accreditation will ensure good quality health service” is doubtful. It shows the need to provide evidence that accreditation procedures can surely improve health services, thus increasing patient satisfaction (Sack et al., 2010; Pomey et al., 2010).

However, the impact of accreditation on quality of services and patient safety is little known (Al-Awa et al., 2012). A previous study on the impact of hospital accreditation status on patient satisfaction showed that there was non-significant impact of hospital accreditation on patient satisfaction (Hayati, et al., 2010; C. Sack et al., 2011).

Another study showed that there were differences and there was no correlation between quality of services and the accreditation program based on the patient perspective (Aboshaiqah et al., 2016). According to Devkaran and O'Farrell (2015), accreditation

standards might not be sensitive enough to evaluate the actual improvement. Therefore, the evaluation can be seen on the spot only during the accreditation survey. In addition, the impact is over after the survey is completed.

SUBJECTS AND METHOD

1. Study Design

This was systematic review study using PRISMA-P (Preferred Reporting Items for Systematic Review and Meta-Analysis Protocol). The researchers searched for articles from 4 databases namely PubMed, ProQuest, Scopus, and EBSCO. The keywords were "hospital accreditation", "patient safety culture", "patient satisfaction", “improveing”, and “impact”.

2. Inclusion and Exclusion Criteria

The inclusion criteria were journal articles in the span of ten years of publication and using English. Based on the investigation, there were 10 relevant articles to be reviewed.

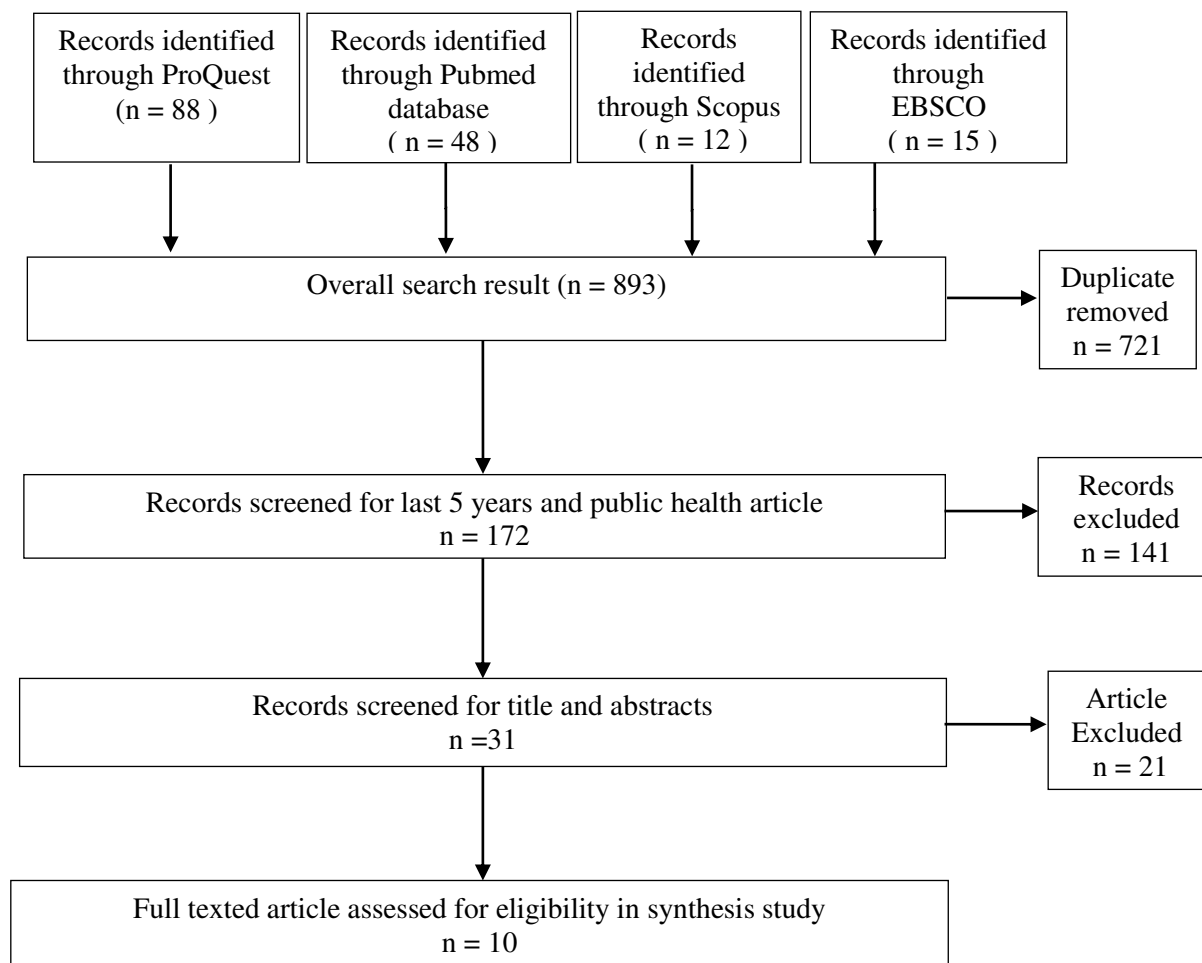


Figure 1. PRISMA Flow Diagram

RESULTS

Based on 10 articles reviewed, 3 articles mentioned that the implementation of patient safety culture significantly increased after accreditation. Accredited hospital had a better overall perceived safety, including the frequency of reporting incidents/safety incidents compared to hospitals that had not been accredited yet. Four other articles stated

that there was no significant difference between accredited and non-accredited hospitals and patient satisfaction. This means that there is no correlation between hospital accreditation and patient satisfaction. However, 2 other articles mentioned that patient satisfaction increased after accreditation.

Table 1. Article of systematic review

No	Author (year)	Title	Place	Study Design	Results	Conclusion
1	Mohebbifar et al. (2017)	Association between Hospital Accreditation and Patient Satisfaction: A Survey in the Western Province of Iran	Iran	cross-sectional	There was a correlation between patient satisfaction scores and length of stay, type of hospital, human resources, physical structure and medical devices, information and education, access to services, management and service coordination. There was non-significant correlation between hospital accreditation and patient satisfaction.	The study states the importance of developing an accreditation system based on outcome parameters and providing responsive services to patients that can have a positive impact on their satisfaction.
2	Al-Awa et al. (2012)	Benchmarking the post-accreditation patient safety culture at King Abdulaziz University Hospital	Jeddah, Saudi Arabia.	Cross-sectional retrospective and prospective study post-accreditation	605 nurses who answered the questionnaires strongly agreed that accreditation increased the perception of patient safety culture	Accreditation is significantly related to patient safety culture
3	Sack et al. (2010)	Challenging the holy grail of hospital accreditation: A cross sectional study of inpatient satisfaction in the field of cardiology	German	Cross-sectional	"Recommendation rate of a given hospital" for accredited hospitals (65.6%, 95% Confidence Interval (CI) 63.4 - 67.8%) and non-accredited hospitals (65.8%, 95% CI 63.1 - 68.5%) showed non-significant differences	Hospital accreditation can increase quality of service, but it does not increase patient satisfaction.
4	Hajali et al. (2014)	Exploring the Relationship between Accreditation and Patient Satisfaction – The Case of Selected Lebanese Hospitals	Lebanon	Cross sectional	Most of the patients (76.34%) were not satisfied with the quality of service. There was statistically non-significant correlation between the classification of accreditation and patient satisfaction. However, tangibility dimensions that reflect structural aspects of the hospital such as physical facilities and equipment were related to patient satisfaction.	This study confirms the importance of considering patient perspectives in the development and implementation of accreditation systems. Accreditation is not the only cause of patient satisfaction. However, hospitals are asked to

5	Dombrádi et al. (2018)	Investigation of the conditions affecting the joining of Hungarian hospitals to an accreditation program: a cross-sectional study	Hungarian	Cross sectional	Hospitals with project preparation for accreditation programs were better in four of the six activities investigated. The head of quality management had a better opinion about the benefit of quality management, surgical safety, and clinical audit. Hospital accreditation received good responses from 901 health professions. The mean (standard deviation) score on the 5-point Likert scale was 3.79 (0.68) for participation in accreditation, 3.85 (0.84) for benefits, and 3.54 (1.01) for the quality of results. There was a statistically significant positive correlation between the dependent variable (quality outcome) and the independent variables (the benefits of accreditation and employee participation). Regression analysis showed $R^2 = 0.46$ and how far the independent variables explained the dependent variable was 46.1%, which was a high level. Patient satisfaction scores increased after accreditation.	adopt complementary ways to increase patient satisfaction. If accredited hospitals in the future are better than other hospitals, the increase can only be contributed to accreditation. Accreditation has a positive impact on the implementation and change processes in hospitals, thus improving patient care services and other health services.
6	Algahtani et al. (2017)	Perception of hospital accreditation among health professionals in Saudi Arabia	Jeddah, Saudi Arabia.	Cross-sectional		
7	Yildiz and Kaya (2014)	Perceptions of nurses on the impact of accreditation on quality of care: A survey in a hospital in Turkey	Hacettepe University Adult Hospital, Turkey	Cross sectional		Hospital accreditation has a positive impact on quality outcomes, especially on the quality of care provided to patients and patient satisfaction.

8	El-Jardali et al. (2011)	Predictors and outcomes of patient safety culture in hospitals	Lebanon	Cross-sectional	Accredited hospitals had much higher perception of patient safety and frequency of incident reporting than non-accredited hospitals.	Incidence reporting, communication, leadership and management of patient safety, staff, and accreditation are identified as key predictors of patient safety culture. Further study is needed to understand the correlation between patient safety culture and clinical outcomes.
9	Marzban et al. (2017)	Status of accessible quality indices in the hospitals of Shahid Beheshti University of Medical Sciences according to accreditation in 2015	Shahid Beheshti University of Medical Sciences Tehran, Iran	Cross-sectional	The most preferred patient satisfaction index was emergency and inpatient services and triage duration. The level of patient satisfaction in the excellent first degree hospitals was lower than first degree hospitals	There is non-significant difference between the index of hospital care processes and various levels of accreditation.
10	Joseph (2018)	The Effect of Accreditation on Patient Satisfaction in Public Healthcare Delivery: A Comparative Study of Accredited and Non-accredited Hospitals in Kerala	Kerala, India	Cross-sectional	There was non-significant impact between accreditation and patient satisfaction.	Making accreditation a useful instrument requires indicators to assess quality based on patient outcomes periodically.

DISCUSSION

In the accreditation process, an organization will commit to improve quality in the implementation of patient safety. It is evidenced by the increased teamwork in the unit and the significant improvement in the implementation of a patient safety culture after accreditation (Al-Awa et al., 2012).

Accredited hospitals had a much higher perception of patient safety and frequency of incident reporting than non-accredited hospitals (El-Jardali et al., 2011). It is in line with a previous study conducted by El-Jardali (2010) that respondents who worked in an accredited hospital were more likely to report incidents, have an increase in patient safety perceptions, and feel the quality of service increased with accreditation. The improvement in the implementation of patient safety culture could be caused by training and learning about patient safety during the accreditation process and hospital staff for example nurses feel the positive benefits of accreditation and carry out tasks by implementing standards (Wanderlei and Montagna, 2018; Yildiz and Kaya, 2014).

However, there was non-significant correlation between accreditation and patient satisfaction. This is in line with a previous study (Hayati et al., 2010; Sack et al., 2011) that there was non-significant difference between accredited and non-accredited hospitals and patient satisfaction. Patients gave different rank satisfaction with the services they receive, it caused by the type of service received, their expectations about service, perceptions and experience of the service (Hayati et al., 2010).

Patient satisfaction in accredited hospitals was not in quality of services, but in the tangibility dimension, namely the structural aspects of the hospital such as physical facilities and equipment (Haj-ali et al., 2014; Mohebbifar et al., 2017; Yildiz and Kaya, 2014). It is challenging because the accredita-

tion is considered to only ensure the hospital has fulfilled the predefined standards but does not see in terms of quality of care or clinical results (Devkaran and O'Farrell, 2015). However hospital staff felt accreditation had a positive impact on the process and implementation changes in the hospital (Algahtani et al., 2017; Yildiz and Kaya, 2014)

Improving patient safety culture after hospital accreditation requires commitment and support from all staff at the hospital, especially from hospital leaders. Accreditation should not only be a standard reference in the hospital change process but also think about how the process improves the quality of care to obtain positive clinical outcomes as well. Ongoing evaluation of the implementation of accreditation needs to be carried out in order to improve quality of services and patient satisfaction.

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