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The Advantages of Accreditation for Healthcare Services

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Abstract

Background To evaluate and enhance the quality of medical care, accreditation is generally accepted as a trustworthy method. However, its impact on efficiency and productivity remains unclear. This review set out to collect and analyze any data that might be relevant to the question of how hospital accreditation affects patient outcomes.

Methods: We searched PubMed, CINAHL, PsycINFO, EMBASE, MEDLINE (OvidSP), CDSR, CENTRAL, ScienceDirect, SSCI, RSCI, and SciELO in depth, as well as other relevant databases, using key terms related to our research question. All expert-reviewed, quantitative studies published in the last two decades were included. Two reviewers independently screened the primary articles, read the full texts of potentially relevant studies, extracted the necessary data, and assessed the methodological quality of the studies included in the analysis using a validated tool, all in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. After looking at the data on the effects of accreditation, six distinct impact themes emerged.

Results: We looked over ١٧,٨٣٠ studies and found only ٧٦ empirical studies that looked into the effects of accreditation met our criteria and were therefore included. Each study took a unique tack in terms of how they went about collecting data. Our results show that accreditation has a positive and lasting impact on hospitals' safety cultures, process-related performance measures, efficiency, and patient lengths of stay. Accreditation was found to have no correlation with measures of employee happiness, patient happiness and experience, or the ٣٠-day hospital readmission rate. It was challenging to draw firm conclusions about the effect of accreditation on healthcare-associated mortality and infections due to the existence of conflicting findings.

Conclusion: There is evidence to suggest that a hospital's overall performance can improve if it complies with accreditation standards. This is just one of several possible benefits. Although there is insufficient evidence to support a definitive link between hospital accreditation and improved performance or patient safety, this has not stopped hospitals from implementing accreditation programs. In order to institutionalize and keep performance gains, it is suggested that efforts be made to modernize accreditation and provide incentives for getting it.

Keywords: Accreditation, Hospitals, Quality of health care, Health services

I. Background

One of the most influential reports ever published in the medical field, "To Err is Human" [١] was written by

the Institute of Medicine (IOM) in ١٩٩٩ [٢]. The report claims that quality has many facets, and that evaluating quality is a key part of boosting productivity [٣, ٤]. Therefore, numerous strategies have been implemented in different parts of the world to control healthcare quality from within and without [٥]. Organizational change, service enhancement, and compliance with quality standards are all aided by external review systems [٦]. When it comes to evaluating the quality of healthcare from the outside, accreditation is by far the most tried-and-true method [٧, ٨].

The American College of Surgeons is credited with initiating the process of hospital accreditation over a hundred years ago [٩]. Since then, hospital accreditation programs have mushroomed and evolved into pivotal parts of quality assurance infrastructure in the healthcare sector [١٠, ١٢]. Over the past two decades, many nations have implemented or revised their own hospital accreditation systems [١٣].

Accreditation is an evaluation of a healthcare provider's conformance to established performance standards by an independent body of experts [١٤], with the ultimate aim of raising standards of care [١٥]. In charge of it are a number of agencies, both public and private, that employ a wide range of methods, some of which are optional and others obligatory. The accreditation scope may cover an entire medical center, a single medical subfield, or a subspecialty [٦, ١٦]. The effectiveness of using accreditation standards as a tool to enhance organizational and clinical performance has been discussed by a number of prominent international healthcare organizations [١٧-١٩], and these organizations have publicly acknowledged accreditation as a valid quality indicator [١٢]. However, there is scant evidence in the published works to back up this contention.

The literature provides a complex picture of the impact of healthcare accreditation [٢٢], despite the apparently promising effect [٢٠, ٢١]. The lack of high-quality trials and inconsistently reported results [٢٣-٢٥] raise doubts about the reliability of accreditation. Contradictory results have led to inconsistent conclusions in the previously published reviews [٦, ١٢, ١٣, ٢٣, ٢٦–٣٥]. Positive effects on hospital culture [١٢, ٣٢, ٣٤], organizational performance [٢٣], clinical practice, patient safety systems [٢٨], quality of services [٢٩], care delivery process [٣٠], and efficiency [٣٥] have been observed after hospital accreditation was implemented. The impact of accreditation on measurable changes in care quality [١٢], health outcomes [٢٦], patient satisfaction [٣١], and economic outcomes [١٣, ٢٦, ٣٤] has been the subject of several reviews, all of which have found insufficient evidence. For instance, Greenfield and Braithwaite [١٣] present conflicting findings on the impact of accreditation, claiming that the effect was limited to promoting change and professional development and that results on other impact categories like quality measures, financial impact, and public disclosure were inconclusive. As an added complication, the cost-effectiveness of accreditation has been questioned in some studies [٦, ٣٢, ٣٣].

Previous reviews of accreditation looked at the effect of specialty [٣٠] or disease [٣٤] specific accreditation programs, which could dilute the overall impact of hospital accreditation, used stringent inclusion designs that could limit its contribution room [٦, ١٢], restricted search languages, or overlooked a number of important relevant studies [٣٥]. This study overcame those barriers in an effort to find and evaluate evidence regarding the results of hospital accreditation.

II. Methodology

Specifically, we followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines [٣٦], which are detailed in the supplementary material. At the outset, we checked Prospero and the Health Systems Evidence (HSE) databases to make sure that no other similar systematic reviews were currently being conducted or had been previously completed.

III. Databases and search terms

It is shown in Additional file ٢ that systematic searches were conducted of electronic bibliographic databases using appropriate subject headings and controlled vocabulary terms to retrieve relevant publications. Many databases are available to researchers, including PubMed, CINAHL, PsycINFO, EMBASE, MEDLINE (OvidSP), ScienceDirect, the Cochrane Database of Systematic Reviews (CDSR), the Cochrane Central Register of Controlled Trials (CENTRAL), and the Web of Science, which includes the Social Sciences Citation Index (SSCI), the Russian Science Citation Index (RSCI), the SciELO Citation Index, and the KCI-Korean Journal Database. The search strategy described here was implemented on ١٨-Feb-٢٠٢٠ by the

primary author after consultation with a subject librarian.

We also conducted a Google Scholar search using terms like "accreditation," "hospital," "quality," "impact," and "healthcare services." We also looked through the websites of the most common accrediting agencies for any additional papers that we might have missed.

IV. Screening and eligibility determination

We included full-text publications that evaluated the effects of hospital accreditation programs on healthcare quality from January ٢٠٠٠ to February ٢٠٢٠. (i.e., since "To Err Is Human"). Inclusion criteria were met by any and all quantitative studies. No additional language barrier was imposed. In the wake of the search, we retrieved and deduplicated the titles and abstracts and then imported them into the citation management system EndNote X٩. After that, two authors (MH, MG) read the full texts of studies that met the inclusion criteria, based on their initial screening of the titles and abstracts. Eligibility for the study was established using the PICO criteria [٣٨]: Outcomes—measurable impacts on structural, process, or outcome parameters; population—all types of hospitals; intervention—all types of overall accreditation; comparison of unaccredited hospitals, before-and-after, or different accreditation levels At any point where there was disagreement between the two authors, it was settled either through mutual agreement or by a third author serving as an arbitrator (MP).

Research that was not published or indexed, compiled in a review, or published in abstract form was not considered. Research on the effects of accreditation on a specific specialty or disease was not included, nor was research on the cost of preparing for accreditation. In addition, no research was included that examined the value participants assigned to accreditation. To assess the significance from different angles, we included comparative studies that used a validated instrument to compare the effects of accreditation on self-reported subjective outcome parameters (like patient satisfaction and job stress).

A kappa inter-rater reliability (IRR) test [٣٩, ٤٠] was utilized to evaluate the consistency of full-text evaluations. Fifty studies that were considered for inclusion by the two reviewers were randomly selected and matched. There were only four dissimilarities discovered, making the kappa coefficient for this pair of measures ٠،٨١, indicating a high degree of agreement.

V. Data extraction

Two authors independently reviewed each study that fulfilled our inclusion criteria, extracted relevant data, and checked the cited works for additional relevant research (i.e., snowballing). Information about the studies' methods, aims, results, and overall interpretations was culled and compiled for this analysis. Unable to extract data due to lack of information? Contact the paper's corresponding author. According to systematic reviews [٤١, ٤٢], Google Translate is an accurate tool for translating papers published in languages other than English, so it was used to translate all relevant studies originally written in languages other than English. To ensure the validity of the non-English studies we included, we emailed the extracted data to the corresponding author and required confirmation of inclusion. We summarized the studies that did not meet our inclusion criteria and recorded the reasons for their exclusion in case of a later audit.

VI. Quality assessment

The methodological rigor of the publications included in this review was evaluated using the Hawker et al. [٤٣] framework, which provides a suitable unified scale for evaluating studies with different designs. The instrument has nine parts, each of which is graded on a four-point scale (١ = good, ٢ = fair, ٣ = poor, ٤ = very poor): abstract and title; introduction and goals; method and data; sampling; data analysis; ethics and bias; findings; transferability; implications and usefulness. Grading was accomplished by averaging these subtotals (١،٠٠-١،٤٩ for good, ١،٥٠-٢،٤٩ for fair, ٢،٥٠-٣،٤٩ for poor, and ٣،٠٠+ for very poor) [٤٤].

Each study was evaluated for its methodological quality by two coders (MH, MG), who then independently assigned a grade and averaged the results. Twenty randomly selected studies that had been assessed were used in a kappa IRR test to determine the reliability of the assessment. Two inconsistencies were found when comparing decisions; this resulted in a kappa of ٠،٨, which is reliable [٣٩, ٤٠].

VII. Analysis

Thematic analysis [٤٦] was used to synthesize the extracted data and present them in a narrative format for text mining [٤٥]. Six impact themes were identified, all of which had been reported in either full or partial form in earlier reviews [٦, ١٢, ١٣, ٢٦, ٢٩, ٣٢] or models [٤٧]. From this vantage point, the effects of accreditation were understood to be the direct result of the accreditation process and could be either positive or negative. If all or the majority of the outcomes were significantly beneficial, the impact was deemed positive; if all or the majority of the outcomes were unfavorable, the impact was deemed negative; and if no significant change was identified, the impact was deemed neutral [٢٦]. The impact themes included shifts in management and culture, changes at the professional and patient levels, shifts in clinical outcomes for patients, shifts in how outcomes are measured, and shifts in financial outcomes. One or more outcomes themes were assigned to each study.

VIII. Results

Search results

We found ١٧,٨٣٠ results in our database. Based on the screening of the titles and abstracts, ٣٢٧ articles were retrieved for a full-text evaluation. Our search yielded ٧٤ studies that fulfilled our inclusion criteria. We included seven studies conducted in languages other than English that had been verified by their authors, and we left out four studies conducted in languages other than English for which we had not received a verification response. By checking the cited works of the included articles, we found two more studies, bringing the total number of studies available for evaluation to ٧٦. (see Fig. ١).

IX. Features of the included studies

Additional file ٣ summarizes the main findings from all studies that were included in our review. Over the past decade, there has been a substantial growth in the number and breadth of studies assessing accreditation's effects. Almost three-quarters (n = ٥٢) of the studies that were considered for this analysis were published in the past five years (٢٠١٥– ٢٠١٩). N = ٦٩ out of n = ٧٠ studies were published exclusively in English. Seven non-English studies were checked and analyzed, and these included publications in Persian, Danish, Korean, and Hungarian.

Twenty-two countries across all seven inhabited continents were surveyed for this study. Research was conducted in the United States (n = ١١) and Brazil (n = ٩). Two large-scale international studies were conducted in European medical centers [١٩, ٢٨]. Twenty-three different accreditation programs' effects were analyzed. The largest number of mentions (n = ١٤) concerned the Joint Commission International Accreditation (JCIA) system. There were ٤٤٠٠ hospitals studied, ٢١ of which (٢٨٪ of the total) looked at the effect accreditation had on a single hospital.

X. Assessment of the methods used

Our review includes many cross-sectional studies (n = ٢٩). ٣٠ studies used a before-and-after format. Twelve studies used a cohort design, and fourteen used a quasi-experimental one. We found only one randomized controlled trial (RCT) to include in our analysis [٤٨]. This level of evidence is suggestive of a connection between accreditation and performance measures; however, causal inferences should be drawn with great care. The lack of methodological consistency across these observational designs rendered a meta-analysis impossible.

There were ٣٢ studies with high methodological quality, ٣٧ studies with moderate quality, and ٧ studies with low quality, as determined by the evaluation of the included studies. Some lower-quality studies (n = ٣) or four studies with mixed results (n = ٤) found a positive [٤٩–٥١] (n = ٤) or neutral [٥٢–٥٥] (n = ٤) accreditation effect, but these results should be interpreted with caution. We disregarded these studies so that our narrative analysis wouldn't be compromised.

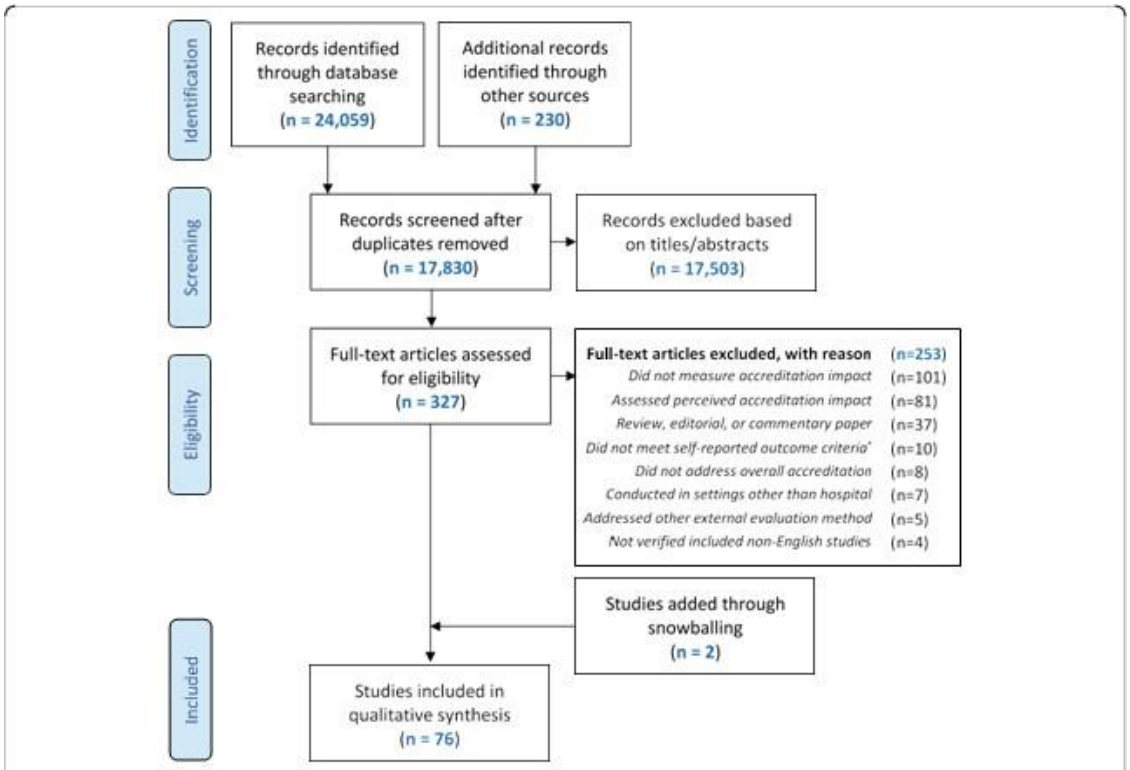

Fig. 1 PRISMA flow diagram illustrating review process. * Self-reported subjective outcome parameter through a validated instrument, using comparative design

the conclusion. This seemed unlikely to alter the review findings.

XI. The impact themes

The included papers were organized into six impact areas based on their topics. Over sixty percent of the papers analyzed could be categorized into two groups: those that focused on "changes in patient clinical outcomes" and those that focused on "changes in performance measures." In fact, ١٦٪ (n = ١٢) of the studies examined the effect of accreditation on more than one indicator, so while our themes are comprehensive, they are not exclusive.

Changes in organizational culture and management

The effect of hospital accreditation on management and culture was measured in five studies [٥٦-٦٠]. The effect of hospital accreditation on safety culture has been studied in a number of self-reported survey studies. Although not all [٥٩], the vast majority [٥٦-٥٨] found a significant correlation between the two. Perceived patient safety [٥٦], safety culture toward reporting of medication errors [٥٧], and organizational culture as manifested by less hierarchical practices and more group and developmental practices [٥٨] all improve as a result of accreditation. However, a recent study found that, from the nurses' point of view, there were no changes to the safety management culture after accreditation [٥٩].

Changes at the professionals' level

Ten studies were found in our review that looked at the effect of accreditation on self-reported parameters like job stress, job satisfaction, and the work environment [٤٩, ٥٩, ٦١-٦٨]. Five of these studies were before-and-after comparisons, while the other five used a comparative approach between accredited and non-accredited hospitals. Seven studies focused on nurses, and the authors found that accreditation had either a negative effect (n = ٤) or no effect (n = ٤).

Studies have shown that accreditation for hospitals consistently increases the amount of stress experienced by workers. For instance, four studies [٥٩, ٦١-٦٣] found that accreditation was linked to health professionals reporting more stress on the job. Elkins et al. [٦٣] found that nurses' job satisfaction and sleep function

significantly improved after accreditation, in addition to stress, anxiety, and depression. However, it is unclear whether accreditation affects job satisfaction or the working environment because of the dearth of research on the topic.

Changes at the patient level

Only ١٤ studies [٢١, ٤٨, ٥٣, ٥٥, ٦٩–٧٨] examined how hospital accreditation affected observable patient-reported outcome parameters. Twelve of the studies (or ٨٠٪) took a cross-sectional, observational approach. Despite the widely held belief that accreditation contributes to improved patient satisfaction and experience, most findings provide little evidence to support whether accreditation status or ratings are meaningfully linked to patient satisfaction and experience.

Table 1 Methodological quality ratings and impact directions of included studies (*n* = 76)

Themes	Definition and Examples	Related Studies Cited as per the Reference List	Methodological Quality			Impact Direction of Good & Fair Studies		
			Good	Fair	Poor	Positive	Negative	Neutral
Changes in organizational culture and management (*n* = 5)	Demonstrated as a significant quantitative hospital managerial or cultural change (e.g., safety culture, communication)	56–60	1	4	0	4	0	1
Changes at the professionals' level (*n* = 10)	Demonstrated as changes in professionals' self-reported outcome parameters (e.g., job stress, job satisfaction)	49, 59, 61–68	3	6	1	1	4	4
Changes at the patient level (*n* = 14)	Demonstrated as a measurable change in self-reported subjective outcome parameters from a patient and user perspective (e.g., patient satisfaction, patient experience)	21, 48, 53, 55, 69–78	6	6	2	3	2	7
Changes in patient clinical outcomes (*n* = 24)	Demonstrated as a statistically significant change in patient health outcome measures (e.g., mortality rate, length of stay)	8, 21, 25, 50–53, 79–95	8	12	4	15	0	5
Changes in the performance measures (*n* = 28)	Demonstrated as a statistically significant change in clinical performance measures (e.g., hand hygiene compliance, medication utilization)	8, 19, 28, 48, 51, 54, 60, 68, 79, 87, 90, 96–111	14	12	2	18	0	8
Changes in economic outcomes (*n* = 8)	Demonstrated as quantifiable changes in financial or economic outcome parameters (e.g., efficiency, profitability)	83, 90, 112–117	4	4	0	5	1	2

There was no link found in the many studies that compared accredited and non-accredited hospitals [٢١, ٤٨, ٧٠, ٧١, ٧٧, ٧٨] or accredited hospitals of varying accreditation levels [٦٩, ٧٢]. Sack et al. [٧٧, ٧٨] looked fora correlation between accreditation and patients' perceptions of higher quality, and they found none.

Changes in patient clinical outcomes

One third (n = ٢٤) of the studies looked into how hospital accreditation affected patient outcomes [٨, ٢١, ٢٥, ٥٠-٥٣, ٧٩-٩٥]. Seventy-five percent of these have been published since ٢٠١٥, a clear response to earlier calls for research into how accreditation affects clinical outcomes. Overall, the results showed a promising trend favoring the hypothesis that accreditation is associated with better clinical outcomes. Fifteen studies found positive effects (n = ٥), while five found no effect (n = ٥), and none found a negative effect. Hospital mortality (n = ١٣) and length of stay (n = ١٢) were the most common measures of interest.

At each level of accreditation, mortality rates were found to decrease in comparative studies [٧٩–٨٤]. While promising, these studies are limited by their focus on just two accreditation models: the JCAHO in the United States and the Danish Healthcare Quality Program (DDKM in Danish: den danske kvalitets model) in Denmark. A recent study found that mortality rates for patients treated in hospitals with high compliance were significantly lower than those treated in hospitals with low [٨٢, ٨٣] or persistently low [٨٤] compliance with accreditation standards. However, contrary results were observed in other research [٨, ٢١, ٨٥-٨٨].

Several studies [٢١, ٨٤, ٨٩, ٩٠] have found no correlation between hospital accreditation and the rate of readmission within ٣٠ days, while others [٢٥, ٨٥, ٩١, ٩٢] have found conflicting effects on the prevalence of healthcare-associated infections. However, accreditation has been shown to reduce patient stays in hospitals [٨٤, ٨٦, ٨٩, ٩٣] and individual departments [٩١, ٩٤, ٩٥].

Changes in the performance measures

Accreditation of hospitals has been shown to raise service standards. So, it's possible to enhance performance metrics for both the structure and the process [٢١, ٨٣]. Our review found ٢٨ studies ([٨, ١٨, ١٩, ٢٨, ٤٨, ٥١, ٥٤, ٦٠, ٦٨, ٧٩, ٨٧, ٩٠, ٩٦-١١١]) examining the effect of accreditation on performance measures. While the effects of accreditation on performance measures are complex and cyclical, the majority of studies (n = ١٨) found that accreditation improved service quality at both the enterprise and unit levels.

Although the one randomized controlled trial included in this analysis found no or a weak association between accreditation and quality indicators [٤٨], the study's methodology was adequate but not sufficient to generalize these results. Several prospective longitudinal and quasi-experimental studies [٨, ٦٠, ٩٦–٩٩] discovered that accreditation significantly improved the quality of services in a variety of ways. Standards compliance [٦٠], adherence to recommended guidelines [٩٧], improvement of structural and process elements [١٩, ٢٨], and sustained change [٩٨] all increased with longer participation in the accreditation process. As one example, a stepped-wedge multi-level study [٩٩] found that accreditation led to significant improvements in a number of processes that had not met the target performance in the six months prior to the accreditation survey. The performance indicators for acute myocardial infarction [٧٩, ١٠٠], heart failure [١٠٠], and pneumonia [١٠٠] have all shown statistically significant improvements after accreditation participation. On the other hand, some studies have shown that accreditation does not improve performance in terms of hand hygiene [١٠١], medication administration errors [١٠٢], or other metrics [٨٧, ١٠٣, ١٠٤].

Changes in economic outcomes

Eight studies [٨٣, ٩٠, ١١١–١١٧] have looked at the financial impact of accreditation. Most of them (n = ٥) influenced various economic outcomes for the better, with healthcare effectiveness standing out as a primary beneficiary.

Accreditation has been shown to have a substantial positive effect on cost reduction [٩٠], increase in outpatient revenue share [٨٣], higher productivity [١١٢], and improved efficiency [١١٣-١١٥], despite the fact that the cost of accreditation varies greatly between countries and programs. An extensive retrospective longitudinal study that tracked ٧٤٨ hospitals over a decade found that hospital accreditation had a significant positive net impact on improving mean efficiency during the accreditation year and the two years following [١١٣]. Two hospitals saved a total of US$٥٩٣,٠٠٠ over three years [٩٠] in an observational study that found hospital accreditation was associated with a ١١٩٪ improvement on a quality index relative to baseline data. On the other hand, hospitals that choose to participate in accreditation programs are less efficient because they must hire more staff and purchase more expensive equipment [١١٦]. Accreditation has been shown to have no substantial effect on OR productivity [١١٧], cash-flow margin, or total cost per case [٨٣].

XII. Discussion

To better understand its effects on healthcare quality, this review combed through the published literature on hospital accreditation over the past two decades. A total of ٧٦ studies met the criteria and were classified bytheir impact.

Over half of the studies that looked at the effect of accreditation found a positive outcome, so the research isn't all negative. Our research demonstrates that accreditation consistently improves process performance indicators, safety culture, hospital efficiency, and patient length of stay. However, staff job stress was found to be negatively impacted across all studies. Contradictory results regarding mortality and healthcare-associated infections made it hard to generalize. Staff job satisfaction, patient satisfaction and experience, and ٣٠-day readmission rate were all found to be unrelated to accreditation. These results may be affected, however, by a number of factors, including but not limited to the diversity of hospital characteristics, the inability to isolate extrinsic confounders, and the differences in accreditation schemes [١٩].

The review we conducted found that accreditation has a beneficial impact on the safety culture of an organization, despite the fact that culture is often blamed for failure. But accreditation has a negative effect on professionals' stress levels individually [٥٩, ٦١-٦٣]. Therefore, it may be necessary to strike a balance between the risks and benefits of accreditation in order to gain the buy-in of health practitioners and get them involved in the process [٣٠, ١١٨]. There doesn't seem to be any way to prevent such a terrible outcome. But improved accreditation standards and procedures, along with public education campaigns, are essential [١١٩].

Consistent with other studies [١٣, ٣١, ٣٢, ٣٤], we discovered no connection between accreditation and happier patients. Patient satisfaction is thought to be an indicator of a hospital's quality of care, but our review disproved this hypothesis [١٢٠]. Although our research lends credence to the idea that accreditation is a tool that promotes the enhancement of internal process delivery [١٢١], the appropriate improvement threshold for being tangible remains unclear. The structure of the accreditation standards and procedures is probably the deciding factor [٤, ١٢٢].

Our investigation uncovered advantages to hospital accreditation before [٥٦, ٩٦], during [٨٠], and after [٩٧, ١٠٧]. However, the impact of accreditation and how long it lasts is a cause for concern because of their cyclical nature [١٦, ٨١, ٩٩, ١٢٣]. According to research, accreditation's beneficial effect on economic outcomes is the result of enhanced performance [٩٠]. However, there weren't enough studies to reliably draw any conclusions. Few studies have been conducted in this area [١٣, ١٢٤], which may be due to the fact that it is difficult to separate the monetary impact of accreditation from other contextual factors.

To complete the puzzle, we need more study of accreditation for hospitals. It could be argued that the diversity and observational nature of the accreditation literature make it less than ideal for drawing firm conclusions about the efficacy of accreditation [١٢٥]. There may not be any observable effects, but this does not mean that there is no cause for concern. In light of the difficulties inherent in conducting randomized trials on such a complex process [١١], observational studies appear to be of undeniable value, despite their limitations.

Our review primarily included cross-sectional and two-way comparative studies (i.e., before-and-after). Consequently, one might contend that the uptick in quality observed in observational studies is not necessarily attributable to the accreditation they received. Even if the observed improvements were merely incidental to other accreditation-driven factors, it is still a win-win situation, and this assumption does not justify abandoning what has already been discovered.

Our analysis is not without its flaws. As far as systematic reviews go, this is one of the largest ones ever conducted on the topic of hospital accreditation and its effects. The study elaborated on the measures and aspects being addressed and affected by the introduction of hospital accreditation in order to clarify the complex view for researchers, policymakers, and stakeholders in the accreditation field. There was a greater chance that all relevant publications would be found thanks to the use of inclusion criteria, citation indices, and multiple databases. We acknowledge that it is still possible to miss some research because it has not been published in scholarly journals. Nonetheless, our research shows that such bias is highly improbable to have affected our findings. It is true that our review lacked depth because we did not look into the grey literature. There may be less publication bias if the review incorporates grey literature [١٢٦]. We only looked at studies that had been peer-reviewed or were indexed in academic journals [١٢٧] to make sure the results were reliable. Our review did not differentiate between developing and developed nations despite the fact that it included evidence on the effectiveness of accreditation in both.

XIII. Conclusion

If accreditation is to have any real effect on the health care system, it must be seen as an adjunct to other performance improvement strategies. Accreditation is an intervention that helps with the "knowledge translation" of standards into daily practice, so any perspective on it must be consistent with this fact [١٢٨]. Despite some drawbacks, accreditation should be pursued. To determine whether the benefits of accreditation outweigh the costs, we concur with previous reviews [٦, ١٢, ٢٣, ٣٢, ٣٣, ١٢٩] in calling for more thorough research into the impact of accreditation, particularly on economic outcomes. Longitudinal designs that account for potential exogenous confounders may help in discerning causal conclusions of accreditation effects, ultimately enhancing decisions in this space.

Our research lends credence to the idea that there are multiple plausible benefits to complying with accreditation standards for the purpose of bettering hospital performance and outcomes. We conclude that implementing hospital accreditation promotes performance improvement and patient safety despite the lack of conclusive evidence on causality and the minor unintended negative consequences, such as job stress. Efforts to incentivize and modernize accreditation are recommended in tandem with other health policies to move towards institutionalization and sustain performance gains.

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