Accreditation domains practiced by the MOH hospitals in Madinah: Nurses’ perspective

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Abstract:

Background: Healthcare institutions all around the world use accreditation to improve the quality of care. The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) is the only national accrediting agency in Saudi Arabia that is responsible for all existing healthcare providers. Despite the significant resources spent on adopting CBAHI standards, little is known about its impact on the quality of care.

Objective: To identify accreditation domains that are highly practiced by the MOH hospital as perceived by nurses, in Madinah – Saudi Arabia.

Methods: A cross-sectional survey design was applied involving five CBAHI accredited MOH hospitals in Madinah. A total of 516 nurses were surveyed. The survey tool, assessing the quality of care and contributing factors, was used.

Results: The majority of nurses involved were female (86%), holding a bachelor degree (54%), staff nurse (89.5%), from 6-10 years experience, 52.7% of nurses were from 30-40 years old, and 95% were not a member of the hospital-wide quality. According to the nurses’ perspective, the most accreditation domains practiced by MOH hospitals were: strategic quality planning with a mean score (3.7026) out of (5) and RII of (74.05%), customer (patient) satisfaction with a mean score (3.6725) out of (5) an RII of (72.29%), and leadership with a mean score (3.6247) out of (5) degree and RII of (72.49%) respectively.

Conclusion: According to the surveyed nurses, strategic quality planning, customer (patient) satisfaction, and leadership were the most practiced accreditation domains. MOH hospitals must pay more attention to other accreditation domains. Further studies are needed to conduct such a study in non-MOH or private hospitals.
Keywords: Quality of Care, Nursing, Accreditation, CBAHI, Quality Improvement, Nursing.

Introduction:
Decision-makers in healthcare organizations are under pressure to improve the delivery and quality of healthcare (Pomey et al., 2010). As a result, tools for quality improvement and sustainability in hospitals are highly sought after (Devkaran et al., 2019). Accreditation was developed to enhance the quality of healthcare (Halasa et al., 2015). It is considered one of the most common tools to improve quality and patient safety (Jovanović, 2005; Pomey et al., 2010). Internationally, healthcare accreditation has become an essential element in healthcare quality activities (Greenfield & Braithwaite, 2008). It is an assessment process of an organization's performance compared to a pre-established set of standards (Braithwaite et al., 2010). Also, it can be defined as an official recognition by an authorized body that the organization has met its pre-determined standards (Braithwaite et al., 2007). Moreover, accreditation varies by country, which can be compulsory or voluntary.

Despite the considerable resources invested in terms of human resources, time, and money towards the healthcare accreditation program, the literature revealed that many studies supported the significant positive impact of the accreditation programs on the quality of care (Oliveira et al., 2019; Nomura et al., 2016a; Aboshaiqah et al., 2016; Habib et al., 2016), while, other studies (Wardhani et al., 2019; Bogh et al., 2015; Schmaltz et al., 2011), showed contradictory results and did not support the positive effects of healthcare accreditation programs.

Furthermore, systemic reviews of the effectiveness of healthcare accreditation programs on the quality of care concluded that the impact of healthcare accreditation on the quality of healthcare was limited and inconclusive (Araujo et al., 2020; Falstie-Jensen et al., 2015; Brubakk et al., 2015). To assess the impact of accreditation programs, various methods were used, each with their own advantages and drawbacks. Some studies have examined the effect of accreditation using pre- and post-accreditation data, such as Almasabi & Thomas (2016) and Alsughayir (2016), while others have surveyed staff using a pre-developed questionnaire such as Shammari et al. (2015); Yildiz & Kaya (2014); and El-Jardali et al. (2008).

Of the national and international healthcare accreditation programs, the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) is a governmental, non-profit organization that was established in 2005 to evaluate both public and private healthcare settings against its standards to grant them accreditation certificates (CBAHI, 2018). The CBAHI accreditation is mandatory for all existing healthcare providers in Saudi Arabia (Mujeeb Shaikh et al., 2018). At first, the CBAHI started with only standards for hospitals, but currently, it has standards for several types of healthcare settings, including primary healthcare centers, clinical laboratories, and ambulatory healthcare centers (CBAHI, 2017).

As a result of implementing hospital accreditation for a long time, the literature review revealed that healthcare providers were frustrated by the heavy workload
resulting from the long list of standards, especially when implementing mandatory programs (Vali et al., 2020). Therefore, the primary objective of this paper is to assess the accreditation domains practiced by nurses at the MOH hospitals in Madinah, Saudi Arabia.

**Methodology:**

**Population and sample:**

The study population were nurses from Ministry of Health (MOH) hospitals that had already been accredited by the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) in Madinah, Saudi Arabia. The Madinah region is considered one of the biggest in Saudi Arabia, with 19 hospitals and 159 primary healthcare centers (MOH, 2018). Moreover, the healthcare facilities in Madinah serve millions of pilgrims and visitors every year.

Nurses who had been hired three months or more prior to the final accreditation survey had been selected. Nurses assigned to administrative activities in the nursing department, as well as interns, were excluded from the study. After identifying the study population and establishing the sample frame, random sampling was conducted. Of 2730 nurses, 530 had received the pre-developed questionnaire.

**Research tool:**

The research tool used in the study was developed by El-Jardali et al. (2008) and is adapted from previous questionnaires by Pomey et al. (2004) and Shortell et al. (1995). This questionnaire aims to measure the impact of accreditation on quality of care. It consisted of nine scales and subscales that were rated on a five-point likert scale (ranging from 1 for strongly disagree to 5 for strongly agree).

The questionnaire has been used in Saudi Arabia by Seada (2012) and Almasabi & Thomas (2016), and they have demonstrated that the overall Cronbach alpha is greater than 0.8. A face validity test was conducted among 30 respondents to ensure the soundness of wording, format, and length. Modifications to selected questions were made to ensure they were culturally appropriate.

Then, a certified translator compared the final draft of the English version with the Arabic version, and corrections were made accordingly. Respondents who had participated in the pilot study were selected from the three biggest hospitals (H1, H2, and H3), which were excluded in the primary study data collection.

The questionnaire consists of three sections. Section A of the questionnaire is aimed at evaluating to what degree these five hospitals were involved in the improvement of patients' quality of care. It comprises of the following six domains: (1) Leadership, (2) Strategic Quality Planning, (3) Human Resources Utilization, (4) Quality Management, (5) Quality Results, and (6) Customer (Patient) Satisfaction. In contrast, Section B consists of one domain that has 14 questions that examine the impact of accreditation on the quality improvement practices of hospitals. The third section of the questionnaire, Section C, is dedicated to gathering background information about the respondents. It includes six items comprising of respondents' gender, age, education, number of years working in the hospital, occupational category (head nurse, supervisor,
nurse, or other), and involvement in the hospital-wide quality assurance or quality improvement steering council.

**Data collection:**

A name list of nurses together with the information on hiring date and area of assignment was obtained from the Nursing Department at each hospital. Nurses who fulfilled the inclusion and exclusion criteria were shortlisted as the sampling frame and random sampling technique was applied to select the final names. These names were forwarded to the managers of the Nursing department and permission was obtained to release their phone numbers to the researcher for further arrangement. The researcher contacted the listed nurses and invited them to participate in the study. Time and location of the meeting was arranged for the distribution of the questionnaire pack.

The questionnaire pack included the consent form, MOH approval, an invitation to participate, a general statement about the study and its purpose, and the assurance of anonymity and confidentiality of respondents. A briefing was conducted to explain how to complete and return the questionnaire.

**Data analysis:**

The Statistical Package for Social Science (SPSS V.25) was used to enter the data. A descriptive analysis was applied to describe the features of the data in the study, such as mean, standard deviation, and relative important index (RII), which was used to determine the relative importance of the study dimensions with its phrases. The Shapiro-Wilk (Normality Test) was applied to test whether the study dimensions were distributed normally or not. Cronbach's alpha was used to determine the reliability of the questionnaire and its measurements. Pearson correlation tests were applied to test the relationship between the dimensions of the study. Finally, a Multiple Linear Regression (MLR) test was applied to test the effects of independent variables: leadership, strategic quality planning, human resources utilization, quality management, customer (patient) satisfaction, and accreditation impact on the quality results, as a dependent variable.

The Relative Important Index (RII) was selected to rank the criteria according to their relative importance. The following formula is used to determine the relative index (Akadiri, 2011):

\[
RII = \frac{W}{A N}
\]

Where (W) is the weighting as assigned by each respondent on the Likert scale, with (1) implying the least weight, (A=5) is the highest weight on the scale, and (N) is the total number of respondents.

The internal consistency reliability coefficient was used to test the reliability of the instrument using Cronbach's alpha. The calculated Cronbach's Alpha was (0.984) for the whole questionnaire (54 items). This result indicates good reliability for the
questionnaire; Cronbach’s alpha ranges from $r = 0$ to $1$, with $r = 0.7$ or greater considered sufficiently reliable (Nunnally and Bernstein, 1994).

The Shapiro-Wilk (Normality Test) was applied to test whether the study dimensions were distributed normally or not. The result demonstrates that the p-value for all domains is equals to zero ($< 0.05$). However, "according to the central limit theorem, with large enough sample sizes ($> 30$ or $40$), the violation of the normality assumption should not cause significant problems (Pallant, 2001).

**Results:**

Five hundred and sixteen questionnaires were received. As seen in Table 1, most of the respondents were female ($n=444$, 86.05%), half of them between 30–45-year-old ($n=272$, 52.71%). A total of 280 respondents (54.26%) had a bachelor's degree, and the majority had been working for 6-10 years ($n=175$, 33.91%). Most of the respondents ($n=462$, 89.53%) were staff nurses, and 95.35% ($n=492$) were not members of the hospital-wide quality.

Table 1: Demographic characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male</td>
<td>72</td>
<td>14.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>444</td>
<td>86.1</td>
</tr>
<tr>
<td>Age</td>
<td>Below 30 years</td>
<td>203</td>
<td>39.3</td>
</tr>
<tr>
<td></td>
<td>Between 30 to 45 years</td>
<td>272</td>
<td>52.7</td>
</tr>
<tr>
<td></td>
<td>Between 46 to 55 years</td>
<td>39</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>Over 55 years</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Education</td>
<td>Diploma</td>
<td>229</td>
<td>44.4</td>
</tr>
<tr>
<td></td>
<td>Bachelor</td>
<td>280</td>
<td>54.3</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Experience</td>
<td>Less than one year</td>
<td>74</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>From 1 to 2 years</td>
<td>38</td>
<td>7.4</td>
</tr>
<tr>
<td></td>
<td>From 3 to 5 years</td>
<td>128</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>From 6 to 10 years</td>
<td>175</td>
<td>33.9</td>
</tr>
<tr>
<td></td>
<td>More than 10 years</td>
<td>101</td>
<td>19.6</td>
</tr>
<tr>
<td>Occupation</td>
<td>Head nurse</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Supervisor</td>
<td>40</td>
<td>7.8</td>
</tr>
<tr>
<td></td>
<td>Staff nurse</td>
<td>462</td>
<td>89.5</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>Membership of the hospital-wide quality</td>
<td>Yes</td>
<td>24</td>
<td>4.7</td>
</tr>
</tbody>
</table>
The descriptive statistics of the responses were applied as means, standard deviation, and Relative Important Index (RII). Of the 5-point Likert scale, don’t know as regarded as missing and excluded from the analysis. For an equal interval length of 5-point Likert scale (0.80), low level of agreements represented by (strongly disagree and disagree) with a mean score in the interval [1: 1.80) and [1.80: 2.60), moderate level for the mean score in the interval [2.60: 3.40) and high level represented by (strongly agree and agree) with the mean score at the interval [3.40: 4.20) and [4.20: 5] (Pimentel, 2010).

The results in Table 2 show that the dependent variable (quality results) had an overall mean score of (3.6118) out of (5) degrees, with a St. D. of (0.74662) and RII (Relative Important Index) of (72.24), indicating that 72.24% of the total participants agreed with the items of the quality results, which were considered at a high level according to the 5-point Likert scale. While the independent variables, all mean scores (> 3.40) indicate a high level of agreement, the leadership domain had an overall mean score of (3.6247) out of (5) degrees, with a St. D. of (0.74206) and RII (Relative Important Index) of (72.49%). The strategic quality planning domain had an overall mean score of (3.7026) out of (5) degrees, with a St. D. of (0.69685) and a RII (Relative Important Index) of (74.05%). The human resources utilization domain had an overall mean score (3.4280) out of (5) degrees, with a St. D. of (.90598) and RII (Relative Important Index) of (68.56%). The quality management domain had an overall mean score (3.6147) out of (5) degrees, with a St. D. of (0.76525) and RII (Relative Important Index) of (72.29%). The customer (patient) satisfaction domain had an overall mean score (3.6725) out of (5) degrees with St. D, of (0.72240) and RII (Relative important index) of (72.29%). Finally, the accreditation impact domain had an overall mean score (3.5753) out of (5) degrees, with a St. D. of (.72514) and a RII (Relative Important Index) of (71.51%).

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>RII (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>515</td>
<td>1.00</td>
<td>5.00</td>
<td>3.62</td>
<td>0.74</td>
<td>72.49</td>
</tr>
<tr>
<td>Strategic Quality Planning</td>
<td>515</td>
<td>1.00</td>
<td>5.00</td>
<td>3.70</td>
<td>0.70</td>
<td>74.05</td>
</tr>
<tr>
<td>Human Resources Utilization</td>
<td>514</td>
<td>1.00</td>
<td>5.00</td>
<td>3.43</td>
<td>0.91</td>
<td>68.56</td>
</tr>
<tr>
<td>Quality Management</td>
<td>516</td>
<td>1.00</td>
<td>5.00</td>
<td>3.61</td>
<td>0.77</td>
<td>72.29</td>
</tr>
<tr>
<td>Customer (Patient) Satisfaction</td>
<td>514</td>
<td>1.00</td>
<td>5.00</td>
<td>3.67</td>
<td>0.72</td>
<td>73.45</td>
</tr>
<tr>
<td>Accreditation impact</td>
<td>510</td>
<td>1.00</td>
<td>5.00</td>
<td>3.58</td>
<td>0.73</td>
<td>71.51</td>
</tr>
<tr>
<td>Quality Results</td>
<td>498</td>
<td>1.00</td>
<td>5.00</td>
<td>3.61</td>
<td>0.75</td>
<td>72.24</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics for participants’ responses

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The Pearson Correlation test was applied across all study dimensions. The correlation was interpreted as negligible (<0.10), weak (0.10–0.39), moderate (0.40–0.69), strong (0.70–0.89), or very strong (≥0.9) based on the absolute magnitude (Schober et al., 2018).

All relations were significant (p < 0.01). The dependent variable (quality results) had three strongly positive relations with the dependent variables. The highest relation found was for customer satisfaction with (r = 0.744), followed by quality management with (r= 0.710), followed by accreditation impact with (r= 0.702). Also, the dependent variable (quality results) had three moderately positive relations with human resources utilization (r= 0.635), strategic quality planning (r= 0.611), and the least positive relation was with leadership (r=0.596) (Table 3).

Table 3. Pearson Correlation matrix results

<table>
<thead>
<tr>
<th></th>
<th>Leadership</th>
<th>Strategic Quality Planning</th>
<th>Human Resources Utilization</th>
<th>Quality Management</th>
<th>Customer (Patient) Satisfaction</th>
<th>Accreditation Impact</th>
<th>Quality Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership</td>
<td>1</td>
<td>.737**</td>
<td>.728**</td>
<td>.717**</td>
<td>.638**</td>
<td>.581**</td>
<td>.596**</td>
</tr>
<tr>
<td>Strategic Quality Planning</td>
<td>1</td>
<td>.733**</td>
<td>.730**</td>
<td>.677**</td>
<td>.613**</td>
<td>.611**</td>
<td></td>
</tr>
<tr>
<td>Human Resources Utilization</td>
<td>1</td>
<td>.755**</td>
<td>.609**</td>
<td>.577**</td>
<td>.635**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Management</td>
<td>1</td>
<td>.727**</td>
<td>.677**</td>
<td>.710**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>1</td>
<td>.646**</td>
<td>.744**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accreditation Impact</td>
<td>1</td>
<td>.702**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality Results</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed)

The Multiple Linear Regression (MLR) was used to test the effects of leadership, strategic quality planning, human, resources utilization, quality management, customer satisfaction, and accreditation impact on the quality results, and the model was significant with (F=153.776, p = 0.000 < 0.01, R= 0.811, R Square = 0.658), indicating that the independent variables explain about 65.8% of the variation that happened in
the dependent variable (quality results). The highest effect on quality results was for customer (patient) satisfaction with (Beta coefficient =0.402) and (p < 0.01), followed by the accreditation impact with (Beta coefficient =0.312) and (p < 0.01), followed by the effect of quality management with (Beta coefficient =0.142) and (p < 0.01), followed by the effect of human resources utilization with (Beta coefficient =0.113) and (p < 0.01), while leadership and strategic quality planning had the slightest impact, respectively, on the quality results (Table 4).

Table 4. Multiple linear regression model result

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.340</td>
<td>.120</td>
<td>2.839</td>
</tr>
<tr>
<td></td>
<td>Leadership</td>
<td>.033</td>
<td>.045</td>
<td>.033</td>
</tr>
<tr>
<td></td>
<td>Strategic quality planning</td>
<td>.025</td>
<td>.052</td>
<td>.024</td>
</tr>
<tr>
<td></td>
<td>Human resources utilization</td>
<td>.113</td>
<td>.038</td>
<td>.138</td>
</tr>
<tr>
<td></td>
<td>Quality management</td>
<td>.142</td>
<td>.050</td>
<td>.145</td>
</tr>
<tr>
<td></td>
<td>Customer satisfaction</td>
<td>.402</td>
<td>.043</td>
<td>.390</td>
</tr>
<tr>
<td></td>
<td>Accreditation impact</td>
<td>.312</td>
<td>.040</td>
<td>.308</td>
</tr>
</tbody>
</table>

Dependent variable: Quality results

Discussion:
The literature emphasizes the importance of measuring the impact of accreditation on the quality of care provided in healthcare organizations (Alkhenizan & Shaw, 2010; Algahtani et al., 2017; Brubakk et al., 2015). The purpose of this study was to identify the accreditation domains that are practiced by MOH hospitals from the nurses’ perspectives. The current study revealed the following three accreditation domains that were highly practiced by MOH hospitals under the study: strategic quality planning, customer (patient) satisfaction, and leadership, respectively. While the human resources management domain was the least practiced domain among the accreditation domains.

The present study revealed that the strategic quality planning domain had the highest score with an overall mean of (3.7026) out of (5), indicating that 34.05% of respondents agreed with its items. This result is consistent with those of Nomura et al. (2016) on analyzing the quality of nursing documentation in university hospital in Brazil, whereby strategic quality planning is a critical factor to the healthcare organizations success. Another study conducted by Al-Qahtani et al. (2012) on the perception of nurses on the quality of care in Saudi Arabia, who revealed the higher practiced of strategic quality planning that can predicts the quality of care. This is also supported by the study of Reisi (2018) and Seada (2012). In contrast, the current results is contradicted with the study of (Almasabi & Thomas, 2016), who emphasized that staff need to be more involved in the quality planning activities.

Furthermore, the current study revealed that customer (patient) satisfaction domains had the second highest mean score among other accreditation domains, with a score of (3.6725) out of (5). This is supported by the study of (Sajid & Baig, 2007) on the...
necessity of quality in healthcare, who clearly mentioned that patient satisfaction is an important and widely used indicator to maintain better quality of care. Another study by Yıldız & Kaya (2014) on the nurse’s perception of the effect of hospital accreditation in a university hospital in Turkey, who revealed that the hospital management routinely measures patient satisfaction, analyzes this data, and takes actions to improve the quality of care at all levels of the organization. This is inconsistent with the study of El-Jardali et al., (2014), who showed a lower mean score for the patient satisfaction domain.

The leadership domain was in the third rank among the most practiced accreditation domains, with an overall mean score of (3.6247) out of (5). The result is confirmed by the study of Sfantou et al. (2017) on the effect of leadership on improving the quality of healthcare, which revealed that effective leadership facilitates the quality improving journey. It is supported by the study of Reisi, (2018), of the providers’ perceptions on the impact of JCA in Iran, which showed that leadership was highly practiced by the hospital under study and it is a good predictor for quality of care. This result can be explained by the evidence that leadership plays a vital role in organizing work, encouraging cooperation at different levels, and directing hospitals to be focused on certain goals and objectives.

There are several possible explanations for these results. First, the CBAHI accreditation is a mandatory program for all public and private healthcare providers. According to Yıldız & Kaya (2014), the practice of accreditation programs differs from one country to another due to some factors: whether the accreditation is voluntary or mandatory, whether it is a public organization or private, whether it focuses on minimal or optimal requirements, whether it deals with process or outcome, whether it is punishment-oriented or improvement-oriented, and whether its results are publicly announced or not. Second, most hospital directors were more concerned with the accreditation certificate than actual improvement. Third, the majority of staff, especially nurses, were not involved in any accreditation or quality-related projects, meetings, or activities. This is also similar to the study conducted by Algahtani et al. (2017), who reported that the participation of healthcare providers is essential to practice accreditation domains. Third, no incentives are allocated for MOH hospitals, as a motivation to implement the CBAHI accreditation standards effectively. This is highly supported by Mansour et al. (2020), who conducted a systematic review on the development of hospital accreditation in low and middle-income countries, and concluded that the government needs to support accreditation by providing financial incentives for hospitals participating in accreditation. Fourth, MOH hospitals that did not meet the CBAHI accreditation standards were not penalized. This is inconsistent with some countries, where hospitals that failed to obtain accreditation were not allowed to sign contracts as panel hospitals with the ministry of health (El-Jardali et al., 2008).

The strength of this study was the use of a widely-used and highly-reliable questionnaire. In addition, the nurses in the study were multinational who had different qualifications and were selected from various hospitals. These strengths allowed the research process to conduct a proper examination of the impact of the CBAHI accreditation program through the highest practiced accreditation domains. Another
strength of this study was that the response rate from some hospitals under study was 100%. All recruited nurses participated in the study. This high response rate shows a willingness to consider the topic of measuring accreditation programs.

One of the inherent weaknesses of this study is that some of the selected hospitals have already obtained the Joint Commission International (JCI) accreditation certificate. The JCI is an independent, not-for-profit accrediting agency, that was established in the United States of America to certify healthcare organizations all over the world (JCI, 2021). Hence, obtaining other accreditation programs like the JCI might affect the findings of the study. Therefore, the scores in the current study might be reflecting the hospital’s responses to the JCI accreditation rather than CBAHI.

Two limitations should be considered for this study. First, the findings of our study were based on the nurses’ perspectives, which might be more subjective than objective. Therefore, including other healthcare providers, especially physicians, is more valuable and useful. Second, the study included only five MOH hospitals in Madinah, which might not reflect other governmental or private hospitals. Therefore, generalization of the study results should be carried out with caution.

**Conclusion:**

This study revealed that strategic quality planning, customer (patient) satisfaction, and leadership were the most practiced among the accreditation domains. While, human resources utilization was the least practiced domain with the lowest mean score. The results of the current study were mainly due to the mandatory nature of the CBAHI accreditation program.

Hence, the findings of this study could provide policymakers in Saudi Arabia and other countries who intend to implement accreditation standards, especially CBAHI, with the factual information on the most practiced accreditation domains for better strategic decisions. Our recommendation consists of further studies that could include physicians, where they deal directly with patients, and have a great impact on their quality of care. Furthermore, we suggest future researchers to conduct a study on non-MOH settings such as private, teaching, or other governmental hospitals that might reveal different results.

**ETHICAL APPROVAL**

The current study was conducted after the approval of the University Science Malaysia ethics committee and the General Directorate Health Affairs ethics committee – Madinah region.

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