

**Proposal research**

**دور وأثر المركز السعودي لاعتماد المنشآت في تطوير وجودة القطاع الصحي**

-

**Impact Saudi Central board for accreditation of healthcare institutions in  
developing and quality of the health sector**

اسم الفريق

فارس سعيد محمد الشهراني

عماد طلبه عبدالواحد سمره

## Table of content

|                                                                    |    |
|--------------------------------------------------------------------|----|
| Chapter one.....                                                   | 3  |
| Introduction.....                                                  | 3  |
| Statement of the problem.....                                      | 5  |
| Study questions.....                                               | 5  |
| objectives of this study.....                                      | 6  |
| The significant of the study .....                                 | 7  |
| theoretical foundations of the study .....                         | 8  |
| methodology of the study.....                                      | 9  |
| Study tools.....                                                   | 10 |
| fields of study. ....                                              | 10 |
| Chapter two literature view .....                                  | 12 |
| CBAHI Standards.....                                               | 12 |
| The Importance of Patient Satisfaction in Healthcare .....         | 13 |
| Defining Patient Satisfaction: .....                               | 14 |
| quality improvement.....                                           | 15 |
| Quality in a healthcare .....                                      | 16 |
| history of clinical.....                                           | 17 |
| Influences on the development of clinical quality improvement..... | 18 |
| Chapter three result and discussion .....                          | 20 |
| Result .....                                                       | 31 |
| - Recommendation.....                                              | 32 |
| References .....                                                   | 33 |

## **Chapter one**

### **Introduction**

Pressure to improve the quality of healthcare services is not unique to Saudi Arabia. Healthcare organizations worldwide are constantly striving to enhance the quality and safety of care they provide to patients. Donabedian's definition of quality of care emphasizes the importance of maximizing patient welfare while considering the expected gains and losses associated with healthcare processes.

The Saudi Center for Accreditation of Healthcare Facilities (CBAHI) plays a crucial role in promoting healthcare quality and patient safety in Saudi Arabia. As the official authority responsible for granting accreditation certificates to all healthcare facilities in the country, CBAHI sets standards for healthcare quality and evaluates facilities based on their adherence to these standards.

By promoting a culture of quality and safety in healthcare, CBAHI helps to improve the overall healthcare sector in Saudi Arabia. The standards set by CBAHI not only ensure that healthcare facilities provide high-quality services but also promote continuous quality improvement and innovation in the sector.

CBAHI works to develop and improve the healthcare sector in Saudi Arabia in many ways, including:

Setting the necessary accreditation standards: The center identifies the necessary standards for accrediting healthcare institutions, including various aspects that affect the quality of healthcare services, such as safety, quality, effectiveness, and efficiency.

Evaluating healthcare facilities: CBAHI evaluates healthcare facilities in the country to ensure their compliance with the specified standards and then grants them the necessary accreditation.

Providing necessary support: The center provides necessary support for healthcare facilities in the country, including training and guidance for their employees and providing information to improve the quality of healthcare services.

The role of CBAHI has a significant impact on the development and quality of the healthcare sector in Saudi Arabia. It contributes to the provision of high-quality healthcare services to patients and beneficiaries and helps improve the level of healthcare in the country.

There are several reasons why the topic of evaluating the effectiveness of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) was chosen for this study. Some of these reasons include:

1. Importance of healthcare quality: Healthcare quality is a critical issue that affects the health and well-being of individuals and populations. Ensuring high-quality healthcare services is a key priority for governments and healthcare providers worldwide, and as such, evaluating the effectiveness of accreditation organizations such as CBAHI is crucial.
2. Relevance to Saudi Arabia: Saudi Arabia has made significant investments in its healthcare sector over the past few decades, and as a result, the sector has seen significant growth and development. However, there is still room for improvement in terms of healthcare quality, and evaluating the role of CBAHI in promoting quality improvement is important for further enhancing the sector.
3. Limited research on CBAHI: While CBAHI has been in operation for several years, there is limited research on its effectiveness in improving healthcare quality in Saudi Arabia. This study aims to fill this gap in the literature and provide insights into the strengths and weaknesses of the current accreditation system.

4. Potential for impact: The findings of this study have the potential to inform policy and practice in Saudi Arabia and beyond, by identifying areas for improvement in the accreditation and evaluation process of healthcare facilities. This can ultimately lead to better health outcomes for patients and help to strengthen the healthcare sector in Saudi Arabia.

### **Statement of the problem**

The healthcare sector in Saudi Arabia has faced various challenges, including the need to ensure the provision of high-quality healthcare services to patients and beneficiaries. In the past, there was a lack of standardized processes and measures for evaluating and accrediting healthcare facilities in the country, which led to variations in the quality of healthcare services provided. This situation resulted in a lack of trust in the healthcare system and dissatisfaction among patients and beneficiaries.

To address these challenges, the Saudi government established the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) to develop and improve the healthcare sector in the country. However, the effectiveness of CBAHI in achieving its objectives and improving the quality of healthcare services in the country needs to be evaluated. Therefore, the problem statement is: How effective has the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) been in developing and improving the quality of the healthcare sector in Saudi Arabia?

### **Study questions**

1. What are the accreditation standards and measures set by CBAHI for healthcare facilities in Saudi Arabia?
2. How does CBAHI evaluate healthcare facilities in Saudi Arabia, and what is the accreditation process?

3. What support does CBAHI provide for healthcare facilities in Saudi Arabia, and how does this support contribute to improving the quality of healthcare services?
4. What impact has CBAHI had on the healthcare sector in Saudi Arabia, and how has it contributed to the improvement of healthcare services?
5. What are the challenges facing CBAHI in achieving its objectives, and how can they be addressed?
6. How can the accreditation and evaluation processes of healthcare facilities be improved to ensure the provision of high-quality healthcare services in Saudi Arabia?
7. What are the views of healthcare providers, patients, and beneficiaries regarding the effectiveness of CBAHI in improving the quality of healthcare services in Saudi Arabia?
8. How does the accreditation and evaluation process of healthcare facilities in Saudi Arabia compare to those in other countries, and what lessons can be learned from international experiences?
9. What are the future plans of CBAHI in improving the quality of healthcare services in Saudi Arabia, and how can they be implemented effectively?
10. How can the Saudi government support CBAHI in achieving its objectives and improving the healthcare sector in the country?

### **objectives of this study**

The objectives of this study are to evaluate the effectiveness of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) in developing and improving the quality of the healthcare sector in Saudi Arabia. The study aims to achieve the following objectives:

1. To study the accreditation standards and measures set by CBAHI for healthcare facilities in Saudi Arabia.

2. To evaluate the accreditation process and the effectiveness of CBAHI in ensuring the provision of high-quality healthcare services in Saudi Arabia.
3. To assess the support provided by CBAHI for healthcare facilities in Saudi Arabia and its contribution to improving the quality of healthcare services.
4. To determine the impact of CBAHI on the healthcare sector in Saudi Arabia and its role in improving the quality of healthcare services.
5. To identify the challenges facing CBAHI in achieving its objectives and suggest recommendations to overcome them.
6. To propose strategies for improving the accreditation and evaluation processes of healthcare facilities in Saudi Arabia to ensure the provision of high-quality healthcare services.
7. To gather the views of healthcare providers, patients, and beneficiaries regarding the effectiveness of CBAHI in improving the quality of healthcare services in Saudi Arabia.
8. To compare the accreditation and evaluation process of healthcare facilities in Saudi Arabia with those in other countries and learn from international experiences.
9. To explore the future plans of CBAHI in improving the quality of healthcare services in Saudi Arabia and suggest ways to implement them effectively.
10. To recommend ways in which the Saudi government can support CBAHI in achieving its objectives and improving the healthcare sector in the country.

### **The significant of the study**

The significance of the study lies in its evaluation of the effectiveness of the Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) in developing and improving the quality of the healthcare sector in Saudi Arabia. This is important because accreditation is a key factor in ensuring that healthcare facilities

meet the necessary standards of quality and safety, and that they are able to provide effective and efficient healthcare services to patients.

By assessing the accreditation process and standards set by CBAHI, the study can provide insights into the strengths and weaknesses of the current system, and identify areas for improvement. This can help CBAHI to strengthen its accreditation process and standards, and ensure that healthcare facilities in Saudi Arabia provide high-quality services that meet international standards.

The study can also contribute to the development of evidence-based policies and practices that can improve the healthcare sector in Saudi Arabia. By identifying the impact of CBAHI on the healthcare sector, the study can inform the development of strategies and initiatives that can enhance the quality of healthcare services, promote patient safety, and improve health outcomes for the population.

Finally, the study can help to raise awareness of the importance of accreditation and quality improvement in the healthcare sector in Saudi Arabia and beyond. This can encourage healthcare professionals and policymakers to prioritize the development of effective accreditation systems and quality improvement initiatives, and ensure that patients receive the best possible healthcare services.

### **theoretical foundations of the study**

The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) plays a significant role in the development and quality of the health sector in Saudi Arabia. The theoretical foundations of a study on the impact of CBAHI on the development and quality of the health sector would likely draw on several key concepts and theories from the fields of healthcare management, quality improvement, and accreditation.

One important theoretical foundation would be the concept of healthcare quality improvement. This involves the continuous effort to improve the quality of

healthcare services provided to patients. Quality improvement is based on the understanding that healthcare is a complex system that is subject to variation and that identifying and reducing variation can lead to improved patient outcomes. The CBAHI's accreditation process is designed to promote quality improvement by requiring healthcare facilities to meet specific standards and undergo regular evaluations.

Another important theoretical foundation would be the concept of accreditation. Accreditation is the process of evaluating and recognizing a healthcare facility as meeting certain standards of care. Accreditation can help to ensure that healthcare facilities are providing safe and effective care to patients. The CBAHI's accreditation process is based on international standards and is designed to promote the continuous improvement of healthcare facilities.

The study may also draw on theories of healthcare management, including the concept of organizational culture. Organizational culture refers to the shared values, beliefs, and practices that shape the behavior of individuals within an organization. The CBAHI's accreditation process may impact the organizational culture of healthcare facilities by promoting a culture of safety, quality, and continuous improvement.

### **methodology of the study**

The methodology of the study involves a mixed-methods approach that combines both quantitative and qualitative research methods. The study will be conducted in several phases, which include:

Literature review: The first phase of the study involves an extensive review of relevant literature on accreditation and quality improvement in healthcare, with a focus on the Saudi Arabian context. This will provide a comprehensive

understanding of the current state of the healthcare sector in Saudi Arabia and the role of CBAHI in promoting quality improvement.

### **Study tools**

Survey: A survey will be conducted to gather data from healthcare providers, patients, and beneficiaries regarding their perceptions and experiences of CBAHI and the accreditation process. Collecting data through an electronic questionnaire is an effective method to gather opinions and experiences of participants regarding CBAHI and the accreditation process. Advanced data analysis tools will assist in understanding and interpreting the collected data more accurately and precisely.

Designing the questionnaire in an objective and scientific manner is important to ensure the quality of the collected data. The questions should be organized in a clear and logical manner to ensure participants' understanding of the topic and provide accurate and useful answers. Various techniques such as short and long questions, multiple-choice, ranking scales, comparative analysis, and others can be used to achieve this goal.

It is also important to distribute the questionnaire widely to reach as many potential participants as possible. The questionnaire link can be shared through social media, email, and relevant websites. Promoting the project through partners and relevant institutions can also increase awareness and enhance individual participation.

After collecting the data, advanced analysis tools can be utilized to analyze the data and provide readable and interpretable results. Statistical analysis can be used to identify trends and relationships between different variables.

### **fields of study.**

Health Services Research focuses on examining various aspects of healthcare delivery, including the evaluation of healthcare interventions, policies, and systems. It involves studying the impact of different initiatives, such as

accreditation programs, on healthcare outcomes, patient safety, quality improvement, and healthcare organization performance.

In the context of the CBAHI, researchers in this field may conduct studies to assess the effectiveness and impact of the accreditation process on the development and quality of the health sector in Saudi Arabia. They may evaluate the extent to which accreditation improves patient safety, enhances healthcare outcomes, promotes standardization of healthcare practices, and drives continuous quality improvement.

These studies may employ various research methodologies, such as quantitative analysis of healthcare data, qualitative interviews and observations, and surveys to gather insights from healthcare professionals, patients, and other stakeholders

## **Chapter two literature view**

### **CBAHI Standards**

CBAHI (Saudi Central Board for Accreditation of Healthcare Institutions) sets national standards that define the expected level of performance for healthcare facilities in Saudi Arabia. These standards are developed by experts in the field and serve as measures of excellence and quality in healthcare provision.

Standards can be categorized into three main types based on the areas they address:

1. Structure Standards: These standards focus on the inputs or components of the healthcare system. They cover aspects such as the availability of hospital beds, the design of hospital buildings, the presence of necessary equipment and supplies, and the availability of personal protective equipment for healthcare workers (e.g., gloves and masks).

1. Activity and Procedure Standards: These standards pertain to the clinical and administrative activities carried out within healthcare facilities. They encompass activities such as patient assessment, patient education, and medication administration, as well as the management of the hospital and its staff.

1. Outcome Standards: These standards assess the results or benefits of healthcare interventions. They determine whether the intended purpose of an activity has been achieved. Outcome indicators include measures such as mortality rates, incidents of foreign objects retained after surgery, air embolism, blood incompatibility, pressure ulcers, falls, and healthcare-associated infections.

The development of standards is an ongoing and cyclic process integrated into CBAHI's strategic plan. The Standard Development Department, along with standard development committees composed of subject matter experts, is responsible for developing, revising, and modifying the standards. Task forces are formed to assist in the development process. The standards undergo a series of

planned processes, including drafting, pilot testing, field review, national consensus, and approval. Communication and orientation activities are conducted with the intended users before the implementation of the standards.

Throughout the implementation phase, feedback is collected from healthcare facilities, surveyors, the healthcare community, and the public. This feedback is essential for the ongoing development, revision, and modification of the standards.

Patient as a Consumer:

### **The Importance of Patient Satisfaction in Healthcare**

In recent years, healthcare systems have undergone significant transformations to prioritize patient-centered care delivery. Patients have become the focal point, leading to the implementation of new organizational models aimed at providing services that cater to their needs. Marketing experts recognize that consumer decisions regarding healthcare utilization are based on their perception of the services rather than the objective reality. Therefore, marketing and patient satisfaction have become crucial as positive word-of-mouth and personal referrals greatly influence the choice of healthcare facilities.

Healthcare services are inherently challenging to measure, making it even more difficult for healthcare providers to influence a patient's perception of quality of care. Patient satisfaction is influenced not only by the availability of qualified physicians but also by how medical care is delivered. To achieve the highest level of satisfaction, which benefits both the patient and the provider, management must effectively manage both patient expectations and the quality of healthcare service delivery.

Understanding patient expectations and the factors that influence them, along with knowledge of the actual and perceived quality of healthcare, provides valuable insights for designing and implementing programs to meet patient needs. With

advancements in technology and increasing competition, hospitals constantly strive to improve their services. Patient expectations are dynamic and continuously evolving, meaning that what satisfies a patient at one point in time may not be sufficient at a later date. As healthcare providers improve service levels in certain areas that impact patient satisfaction, it leads to a change in patient expectations across other aspects of care.

**Defining Patient Satisfaction:**

In order to effectively evaluate patient satisfaction, it is essential to have a clear understanding of what it entails. Defining patient satisfaction helps establish an evaluation process that incorporates relevant measures of the variables contributing to patient satisfaction. While patients may generally express satisfaction with healthcare services, it is important to recognize that their satisfaction may not be uniform across all aspects of their care. Therefore, healthcare management must consistently gauge the level of satisfaction required to achieve high patient satisfaction and encourage patient loyalty (Naidu, 2009).

Patient satisfaction can be defined as "an individual's positive emotional response, ranging from pleasure to disappointment, resulting from comparing perceived performance or outcome of a product or service with their expectations" (Anand, Kaushal, & Gupta, 2012; Rashmi & Vijakumar, 2010).

A patient's experience is built upon numerous encounters with various situations throughout their healthcare journey. This experience begins with touchpoints that can include interactions with a healthcare facility's website, followed by physical visits to the facility, the admissions process, meetings with doctors, nurses, lab technicians, and support staff. It encompasses physical aspects such as the location of patient rooms, along with the level of care and attention received while in those rooms, and concludes with the discharge process. Many factors can influence a

patient's perception of the care received during an inpatient stay. These factors may include the cleanliness and appearance of the facility, ease of access to specific locations, waiting times, the clarity of communication with physicians, treatment outcomes, cost of the visit, quality of food, and more (Anand et al., 2012).

In summary, patient satisfaction refers to the positive emotional response a patient experiences when comparing their perceived healthcare performance or outcomes with their initial expectations. Evaluating patient satisfaction requires a comprehensive understanding of the patient's entire healthcare journey, encompassing various touch points and encounters. By effectively measuring and addressing the factors that contribute to patient satisfaction, healthcare organizations can strive to enhance the overall patient experience and foster patient loyalty.

### **quality improvement**

The importance of quality improvement and patient safety in healthcare services research is increasingly recognized as a significant field of study (Grol et al., 2004; Stevens, 2005). However, establishing an optimal methodology for this field is debatable due to the need for interdisciplinary collaboration. While the development of an academic field usually takes years, the urgency to improve and ensure the safety of healthcare has expedited progress in this area (Stevens, 2005). Nevertheless, recent commentaries highlight that research in healthcare quality improvement is still evolving, possibly due to a lack of clarity regarding the research agenda, limited research capacity, and insufficient policy emphasis (Grol et al., 2008).

The concept of "improvement science" has been discussed as a potential discipline in this field. It refers to the systematic application of scientific methods to acquire knowledge about the specific problem at hand (Langley, Nolan, Nolan et al., 1996). Improvement science is seen as a central component of healthcare, emphasizing the need to obtain knowledge in order to drive improvement (Stevens, 2007).

However, a search using the term "improvement science" in academic databases yielded limited results, including the description of the Model for Improvement (Langley et al., 1996) and a framework for improvement science (Clarke, Reed, Wainwright et al., 2004) that encompasses user needs, change methods and strategies, knowledge management, professional subject knowledge and development, and working in context. The discipline of improvement science distinguishes itself from traditional "modernist" approaches by incorporating various perspectives, acknowledging the dynamics of politics and power distribution among stakeholders, and recognizing the context-specific nature of change, while still applying universal principles of innovation diffusion (Clarke, Reed, Wainwright et al., 2004).

One example of applying improvement science principles is a study that aimed to improve access to services for children with autism (Manning-Courtney, 2007). By utilizing the principles of improvement science, this study demonstrated how a systematic approach can be employed to address specific challenges and enhance service provision.

### **Quality in a healthcare**

The literature on healthcare quality improvement highlights two primary areas of focus: clinically-led improvement and quality management. In the past, these areas were often treated as separate and independent activities within healthcare organizations, leading to potential issues such as misaligned objectives, duplicated efforts, and a lack of emphasis on improving both clinical evidence and the care process (Berwick, 2008).

Healthcare organizations face the challenge of enhancing both clinical and managerial quality while recognizing their interdependence. To address this challenge, it is crucial to comprehend the origins of both clinical and industrial improvement in order to identify common themes and interactions.

In order to improve healthcare quality, organizations need to integrate clinical expertise and managerial approaches. Clinically-led improvement initiatives should involve input from management professionals to ensure effective implementation and organizational alignment. Similarly, quality management efforts should take into account the specific clinical context and the importance of evidence-based practices.

## **history of clinical**

The history of clinical quality improvement has been significantly shaped by the medical profession, which has historically adopted a craft-based approach to their work, placing a strong emphasis on the individual skills of clinicians as the primary determinant of quality. Within this framework, individual practitioners have traditionally held control over the quality of care they provide, often at an implicit level, as an integral part of their professional practice. As a result, the competence of individual clinicians has played a crucial role in delivering high-quality care, and standards have been upheld through mechanisms such as regulating entry into the profession and maintaining professional education standards.

The influence of the craft-based model can be observed in early approaches to evaluating quality in medical practice. This includes outcome-related studies on morbidity and mortality, clinical case conferences, and the introduction of medical audit, all of which placed a strong emphasis on closed discussions about quality and standards, often employing peer review methods (Harvey, 1996). As the importance of quality in healthcare policy grew, formal requirements for doctors to engage in quality improvement and audit also emerged. For example, the late 1980s saw the mandatory introduction of medical audit in the UK (Department of Health, 1989). However, some doctors perceived these changes as a threat to the traditional craft-based organization of medical work, leading to resistance towards medical audit and the distinction between internal, peer-reviewed audit activities and external, regulatory mechanisms (Shaw, 1980).

Throughout these developments, several influential clinicians have challenged traditional thinking and spearheaded advancements in medical quality evaluation and improvement. A comprehensive review by Kenney (2008) highlights the contributions of these key individuals.

Ernest Codman, a US surgeon, made significant contributions to outcomes-based patient care as early as 1916 when he introduced and published the "ends results" system for auditing surgical care (Codman, 1916). He is widely regarded as the founder of this approach and advocated for the public disclosure of such information to guide patient choices in selecting hospitals and physicians.

In the 1960s and 70s, Avedis Donabedian expanded on Codman's work by presenting quality as a multidimensional concept. He emphasized that quality of

care is influenced not only by the technical aspects but also by the interpersonal relationship between doctors and patients, as well as the physical amenities of care (Donabedian, 1966). Donabedian also introduced a systems-based approach to understanding medical quality through his well-known structure-process-outcome model.

Don Berwick, a prominent figure in quality improvement, has been interested in the field throughout his career. In the 1980s, he studied and applied industrial models of quality improvement in healthcare, including those proposed by quality gurus (Kenney, 2008). In 1987, he established the National Demonstration Project on Quality Improvement in Health Care, which brought together like-minded individuals in the US healthcare system who recognized the potential of applying industrial improvement methods in healthcare.

Berwick has been a leading advocate for shifting from medical audit to more improvement-based approaches to quality. He has called for meaningful change based on audit results and has published extensively on the subject, earning international recognition (Berwick, Endhoven & Bunker, 1992; Kenney, 2008). Berwick and his colleagues have proposed that the medical profession should expand its perspective beyond immediate knowledge and experience to incorporate general theories of organizational change and industry-based approaches to quality improvement (Berwick, 2008). This broader view of quality includes patient-centric perspectives, with clinicians acquiring new skills such as teamwork, process analysis, guideline development, and collaborative work with patients, managers, and other professionals.

Furthermore, there has been a recognition that the medical culture, which discouraged error disclosure, hindered quality improvement efforts. As a result, the link between quality and safety has been made more explicit (Kenney, 2008).

### **Influences on the development of clinical quality improvement**

In recent years, the field of clinical quality improvement has been influenced by various factors that have introduced new concepts and approaches to enhance integration with wider organizational quality initiatives. Two significant influences are the evidence-based medicine movement and public inquiries into major healthcare failures.

One development stemming from the evidence-based medicine movement is the emphasis on clinical guidelines. Clinical guidelines are systematically developed statements that assist practitioners and patients in making decisions about appropriate healthcare for specific clinical circumstances. These guidelines are based on available research evidence. However, despite substantial investment in their development, research suggests that their impact on actual practice and patient outcomes varies, highlighting the challenges involved in translating evidence into practice.

Care pathways are another tool used to standardize processes of care delivery. They can be employed to translate national guidelines into local practice or to map ideal processes for specific care groups. Care pathways are structured, multidisciplinary plans of care that support the implementation of clinical guidelines and protocols. They provide guidance at each stage of managing patients with specific conditions, encompassing both process and outcome details. The aim of care pathways is to improve continuity and coordination of care, facilitate effective resource planning, and provide comparative data on various aspects of quality of care. It is claimed that they reduce variation and improve outcomes.

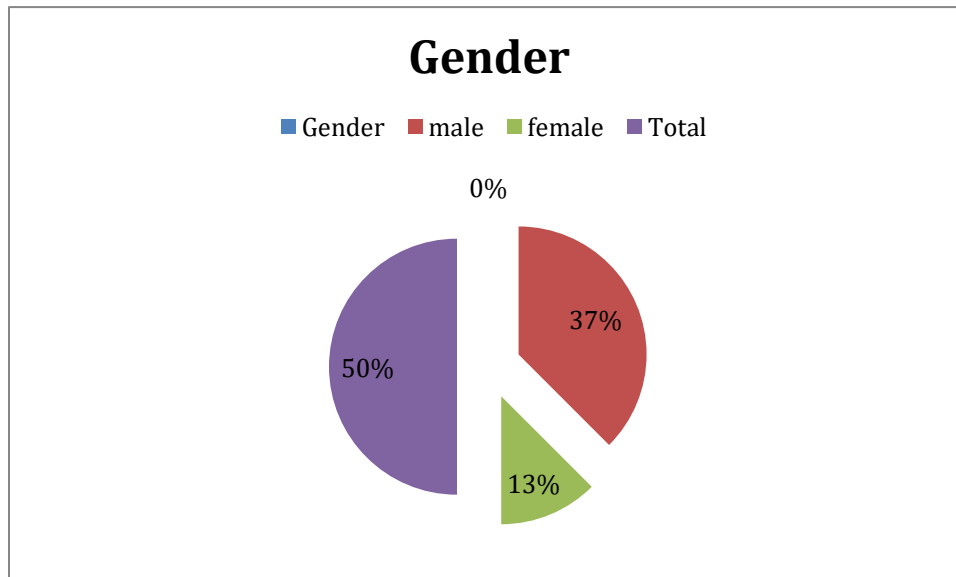
Clinical governance, as a concept, emerged as an overall strategy within the policy on quality in the UK's National Health Service (NHS). It gained prominence following a high-profile failure of care in a hospital providing pediatric cardiac surgery services, which exposed organizational shortcomings. As a response, statutory changes were introduced, imposing a legal duty of quality on chief executives and boards of NHS organizations. This marked the first time that there was a corporate responsibility for the quality of clinical care. At a strategic level, this policy signaled the need for coordinated and board-level leadership in managing and improving quality within healthcare organizations.

### Chapter three result and discussion

The purpose of this chapter is to present the steps of study design, including the nature of the study, the study population and sample, the field study tool, the measures used in the study, data collection methods, and statistical analysis methods.

**Table 1 Distribution of the study sample according to gender**

| Gender | Frequency | Percent |  |
|--------|-----------|---------|--|
| male   | 27        | 75.0    |  |
| female | 9         | 25.0    |  |
| Total  | 36        | 100.0   |  |

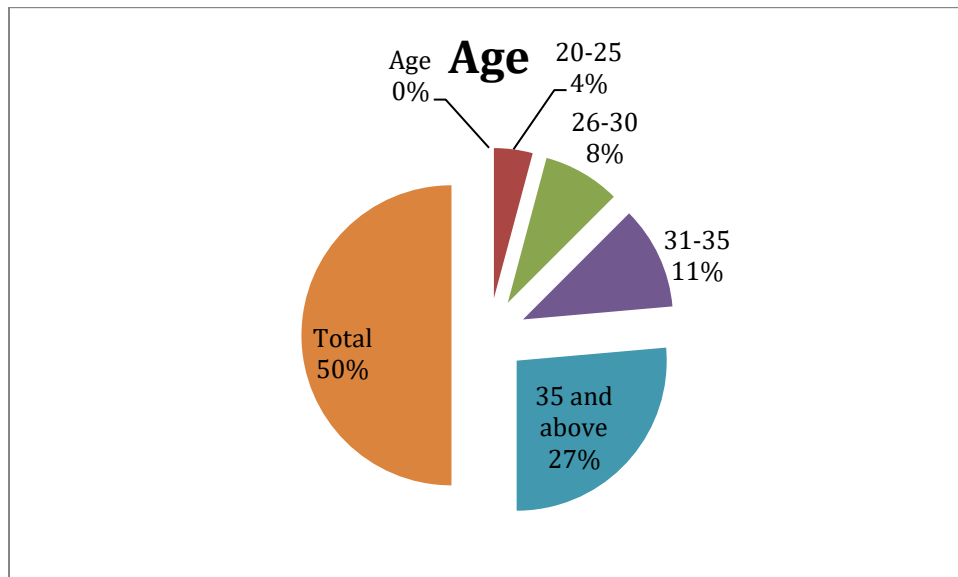


**figure 1 Distribution of the study sample according to gender**

Demographic analysis of the sample according to gender The previous table shows that most of the study sample are males, with a percentage of 75%, while females, with a percentage of 25%.

**Table 2 Distribution of the study sample according to age**

| Age          | Frequency | Percent |
|--------------|-----------|---------|
| 20-25        | 3         | 8.3     |
| 26-30        | 6         | 16.7    |
| 31-35        | 8         | 22.2    |
| 35 and above | 19        | 52.8    |
| Total        | 36        | 100.0   |

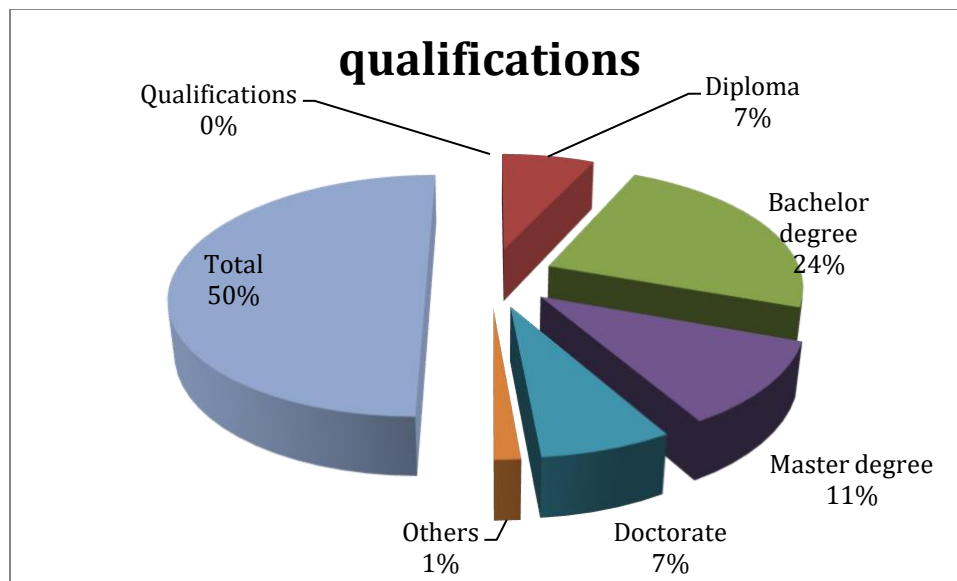


**figure 2 Distribution of the study sample according to age**

Demographic analysis of the sample according to age The previous table shows that most of the sample are those aged 35 and over with a rate of 52.8%, followed by 31–35 with a rate of 8%, followed by 26–30 with a rate of 6%, followed by from 20 to 25 with a rate of 3%

**Table 3 Distribution of the study sample according to Qualifications**

| Qualifications  | Frequency | Percent |
|-----------------|-----------|---------|
| Diploma         | 5         | 13.9    |
| Bachelor degree | 17        | 47.2    |
| Master degree   | 8         | 22.2    |
| Doctorate       | 5         | 13.9    |
| Others          | 1         | 2.8     |
| Total           | 36        | 100.0   |



**figure 3 Distribution of the study sample according to Qualifications**

It is clear from the previous table that most of the respondents hold a bachelor's degree with a percentage of 47.2%, followed by a master's degree with a percentage of 22.2%, followed by a diploma and a doctorate with a percentage of 13.9%, followed by others with a percentage of 2.8%, and this indicates that most of the sample are those who hold High academic degrees

**Table( 4)show descriptive statistics for Quality Improvement:**

|   | Questions                                                                                                                                     |   | Strong agree | agree | neutral | Dis agree | Strongly dis agree | mean | Sat Deviation |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------|---|--------------|-------|---------|-----------|--------------------|------|---------------|
| 1 | Quality Improvement 1. The CBAHI has played a significant role in enhancing the overall quality of healthcare services in Saudi Arabia        | N | 18           | 9     | 3       | 3         | 3                  | 4.00 | 1.30          |
|   |                                                                                                                                               | % | 50.0         | 25.0  | 8.3     | 8.3       | 8.3                |      |               |
| 2 | The CBAHI accreditation process has promoted a culture of continuous quality improvement in healthcare institution                            | N | 15           | 13    | 3       | 1         | 4                  | 3.94 | 1.28          |
|   |                                                                                                                                               |   | 41.7         | 36.1  | 8.3     | 2.8       | 11.1               |      |               |
| 3 | The CBAHI standards and guidelines have been effective in addressing the specific quality issues and challenges faced by healthcare providers | N | 13           | 15    | 3       | 1         | 4                  | 3.89 | 1.26          |
|   |                                                                                                                                               | % | 36.1         | 41.7  | 8.3     | 2.8       | 11.1               |      |               |
| 4 | The CBAHI has facilitated the implementation of evidence-based                                                                                | N | 11           | 14    | 6       | 2         | 3                  | 3.78 | 1.19          |
|   |                                                                                                                                               | % | 30.6         | 38.9  | 16.7    | 5.6       | 8.3                |      |               |

|   |                                                                                                                      |   |      |      |      |     |      |      |      |
|---|----------------------------------------------------------------------------------------------------------------------|---|------|------|------|-----|------|------|------|
|   | practices and clinical guidelines in healthcare institutions                                                         |   |      |      |      |     |      |      |      |
| 5 | The CBAHI accreditation has positively influenced the patient safety practices and outcomes in healthcare facilities | N | 14   | 11   | 5    | 2   | 4    | 3.81 | 1.32 |
|   |                                                                                                                      | % | 38.9 | 30.6 | 13.9 | 5.6 | 11.1 |      |      |

The statistical analysis of the variable "quality improvement" indicates that the majority of the respondents agree that CBAHI plays a significant role in enhancing the overall quality of healthcare services in Saudi Arabia, as evidenced by the highest average mean of 4.00 and a standard deviation of 1.30 for the first question. This is followed by the second question, which suggests that the CBAHI accreditation process promotes a culture of continuous quality improvement in healthcare institutions, with an average mean of 3.94 and a standard deviation of 1.28. The third question indicates that the CBAHI standards and guidelines have been effective in addressing specific quality issues and challenges faced by healthcare providers, with an average mean of 3.89 and a standard deviation of 1.26. The fourth and fifth questions assess the positive influence of CBAHI accreditation on patient safety practices and outcomes in healthcare facilities, with average means of 3.81 and 3.78, and standard deviations of 1.32 and 1.79, respectively.

**Table( 5)show descriptive statistics for Effectiveness:**

|   | Questions                                                                                                                          |   | Strong agree | agree | neutral | Dis agree | Strongly dis agree | mean | Sat Deviation |
|---|------------------------------------------------------------------------------------------------------------------------------------|---|--------------|-------|---------|-----------|--------------------|------|---------------|
| 1 | <b>Effectiveness 1. The CBAHI accreditation process has effectively identified areas of improvement in healthcare institutions</b> | N | 12           | 14    | 4       | 1         | 5                  | 3.75 | 1.33          |
|   |                                                                                                                                    | % | 33.3         | 38.9  | 11.1    | 2.8       | 13.9               |      |               |
| 2 | <b>The CBAHI has successfully implemented measures to enhance patient outcomes in healthcare facilities</b>                        | N | 11           | 15    | 5       | 1         | 4                  | 3.78 | 1.24          |
|   |                                                                                                                                    |   | 30.6         | 41.7  | 13.9    | 2.8       | 11.1               |      |               |
| 3 | The CBAHI accreditation has led to improved compliance with healthcare standards and guidelines                                    | N | 12           | 13    | 5       | 2         | 4                  | 3.75 | 1.29          |
|   |                                                                                                                                    | % | 33.3         | 36.1  | 13.9    | 5.6       | 11.1               |      |               |
| 4 | The CBAHI has effectively incentivized healthcare institutions to invest in quality improvement initiatives                        | N | 14           | 15    | 2       | 1         | 4                  | 3.94 | 1.26          |
|   |                                                                                                                                    | % | 38.9         | 41.7  | 5.6     | 2.8       | 11.1               |      |               |
| 5 | The CBAHI accreditation has improved the overall patient experience in healthcare settings                                         | N | 14           | 15    | 1       | 3         | 3                  | 3.94 | 1.24          |
|   |                                                                                                                                    | % | 38.9         | 41.7  | 2.8     | 8.3       | 8.3                |      |               |

The statistical analysis of the variable "effectiveness" indicates that the majority of respondents agree that CBAHI has effectively incentivized healthcare institutions to invest in quality improvement initiatives and has improved the overall patient experience in healthcare settings, as evidenced by the highest average mean of 3.94 and a standard deviation of 1.24 for both questions. This is followed by the question regarding the successful implementation of measures to enhance patient outcomes in healthcare facilities, with an average mean of 3.78 and a standard deviation of 1.24. The first and third questions, which pertain to the effective identification of areas of improvement in healthcare institutions and improved compliance with healthcare standards and guidelines, have average means of 3.75 and a standard deviation of 1.29 for both.

This suggests that the majority of the sample agrees that CBAHI has been effective in incentivizing healthcare institutions to invest in quality improvement initiatives and has improved the overall patient experience in healthcare settings. Additionally, the accreditation process has been successful in identifying areas of improvement and improving compliance with healthcare standards and guidelines.

**Table( 6)show descriptive statistics for Effectiveness: Alignment with Strategic Goals**

|   | Questions                                                                                                                                                    |   | Strong agree | agree | neutral | Dis agree | Strongly dis agree | mean | Sat Deviation |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------|-------|---------|-----------|--------------------|------|---------------|
| 1 | Alignment with Strategic Goals 1. The objectives of the CBAHI are aligned with the strategic goals of the health sector in Saudi Arabia.                     | N | 9            | 17    | 3       | 3         | 4                  | 3.67 | 1.26          |
|   |                                                                                                                                                              | % | 25.0         | 47.2  | 8.3     | 8.3       | 11.1               |      |               |
| 2 | 2. The CBAHI accreditation process effectively supports the achievement of strategic goals in healthcare institutions.                                       | N | 9            | 17    | 4       | 3         | 3                  | 3.72 | 1.18          |
|   |                                                                                                                                                              | % | 47.2         | 25.0  | 11.1    | 8.3       | 8.3                |      |               |
| 3 | 3. The CBAHI provides guidance and resources that assist healthcare organizations in aligning their operations with the strategic goals of the health sector | N | 10           | 14    | 7       | -         | 5                  | 3.67 | 1.28          |
|   |                                                                                                                                                              | % | 27.8         | 38.9  | 19.4    | -         | 13.9               |      |               |
| 4 | 4. The CBAHI actively collaborates with key stakeholders to ensure alignment between accreditation standards and strategic goals                             | N | 11           | 13    | 7       | 1         | 4                  | 3.72 | 1.25          |
|   |                                                                                                                                                              | % | 30.6         | 36.1  | 19.4    | 2.8       | 11.1               |      |               |

|   |                                                                                                                                              |   |      |      |      |     |      |      |      |
|---|----------------------------------------------------------------------------------------------------------------------------------------------|---|------|------|------|-----|------|------|------|
| 5 | 5. The CBAHI accreditation process has positively influenced the strategic planning and decision-making processes of healthcare institutions | N | 12   | 14   | 5    | 1   | 4    | 3.81 | 1.26 |
|   |                                                                                                                                              | % | 33.3 | 38.9 | 13.9 | 2.8 | 11.1 |      |      |

The statistical analysis reveals that the highest percentage is observed for the fifth question:

"The CBAHI accreditation process has positively influenced the strategic planning and decision-making processes of healthcare institutions," with an average mean of 3.81 and a standard deviation of 1.26.

This is followed by the second and fourth questions:

"The CBAHI accreditation process effectively supports the achievement of strategic goals in healthcare institutions" and "The CBAHI actively collaborates with key stakeholders to ensure alignment between accreditation standards and strategic goals," with average means of 3.72 and 1.38 standard deviations for both. Next are the first and third questions:

"The objectives of the CBAHI are aligned with the strategic goals of the health sector in Saudi Arabia" and "The CBAHI provides guidance and resources that

assist healthcare organizations in aligning their operations with the strategic goals of the health sector," with average means of 3.67 and a standard deviation of 1.26.

This demonstrates that the CBAHI accreditation process has a positive influence on the strategic planning and decision-making processes of healthcare institutions. It also indicates that the CBAHI effectively supports the achievement of strategic goals and collaborates with key stakeholders to ensure alignment between accreditation standards and strategic goals. Moreover, the objectives of the CBAHI are aligned with the strategic goals of the health sector in Saudi Arabia, and the CBAHI provides guidance and resources to assist healthcare organizations in aligning their operations with the strategic goals of the health sector.

**Table( 7)show descriptive statistics for Effectiveness**

|   | Questions                                                                                                                          |   | Strong agree | agree | neutral | Dis agree | Strongly dis agree | mean | Sat Deviation |
|---|------------------------------------------------------------------------------------------------------------------------------------|---|--------------|-------|---------|-----------|--------------------|------|---------------|
| 1 | Patient Outcomes 1.<br>The accreditation process by CBAHI has positively impacted patient safety in healthcare institutions        | N | 15           | 12    | 2       | 3         | 4                  | 3.86 | 1.35          |
|   |                                                                                                                                    | % | 41.7         | 33.3  | 5.6     | 8.3       | 11.1               |      |               |
| 2 | Patients treated in CBAHI-accredited healthcare institutions experience improved clinical outcomes.                                | N | 11           | 15    | 5       | -         | 5                  | 3.75 | 1.29          |
|   |                                                                                                                                    |   | 30.6         | 41.7  | 13.9    |           | 13.9               |      |               |
| 3 | The CBAHI accreditation process has led to a reduction in preventable medical errors and adverse events in healthcare institutions | N | 12           | 14    | 4       | 1         | 5                  | 3.75 | 1.33          |
|   |                                                                                                                                    | % | 33.3         | 38.9  | 11.1    | 2.8       | 13.9               |      |               |
| 4 | CBAHI accreditation has enhanced the overall quality of patient care in healthcare institutions.                                   | N | 12           | 15    | 3       | 1         | 5                  | 3.78 | 1.33          |
|   |                                                                                                                                    | % | 33.3         | 41.7  | 8.3     | 2.8       | 13.9               |      |               |
| 5 | Patients have reported increased satisfaction with the care received in CBAHI-accredited healthcare institution                    | N | 12           | 13    | 6       | 1         | 4                  | 3.78 | 1.33          |
|   |                                                                                                                                    | % | 33.3         | 36.1  | 16.7    | 2.8       | 11.1               |      |               |

The statistical analysis of the variable "Patient Outcomes" reveals that the highest percentage was obtained for the first question: "The accreditation process by CBAHI has positively impacted patient safety in healthcare institutions," with an

average mean of 3.86 and a standard deviation of 1.35. This is followed by the fourth and fifth questions: "CBAHI accreditation has enhanced the overall quality of patient care in healthcare institutions" and "Patients have reported increased satisfaction with the care received in CBAHI-accredited healthcare institutions," with average means of 3.78 and a standard deviation of 1.33 for both. The second and third questions: "Patients treated in CBAHI-accredited healthcare institutions experience improved clinical outcomes" and "The CBAHI accreditation process has led to a reduction in preventable medical errors and adverse events in healthcare institutions," rank at the bottom with average means of 3.75 and a standard deviation of 1.29 for both. This highlights that

This demonstrates that the majority of respondents agree that the accreditation process by CBAHI has positively impacted patient safety in healthcare institutions, enhanced the overall quality of patient care, and increased patient satisfaction. However, the perception of improved clinical outcomes and a reduction in preventable medical errors and adverse events in CBAHI-accredited healthcare institutions is slightly lower, yet still positive

## **Result**

Based on the statistical analysis of the variables, "quality improvement," "effectiveness," "strategic planning and decision-making," and "patient outcomes," the following results and recommendations can be derived:

### **1. Quality Improvement:**

- The majority of respondents agree that CBAHI plays a significant role in enhancing the overall quality of healthcare services in Saudi Arabia.

### **1. Effectiveness:**

- Respondents believe that CBAHI effectively incentivizes healthcare institutions to invest in quality improvement initiatives and improves the overall patient experience.

- The CBAHI accreditation process has a positive influence on the strategic planning and decision-making processes of healthcare institutions.

#### 1. Patient Outcomes:

- CBAHI accreditation has positively impacted patient safety, enhanced the overall quality of patient care, and increased patient satisfaction in healthcare institutions.

Overall, the results suggest that CBAHI has made significant progress in promoting quality improvement, effectiveness, strategic planning, and positive patient outcomes in healthcare institutions. It is recommended to build upon these achievements and continue to monitor and evaluate the impact of CBAHI accreditation on healthcare services to ensure continuous improvement.

#### – **Recommendation**

Continue to promote and support CBAHI accreditation as a means to drive continuous quality improvement in healthcare institutions.

Continue to focus on patient safety initiatives, promote best practices to improve clinical outcomes, and further reduce preventable medical errors and adverse events in CBAHI-accredited healthcare institutions.

Strengthen the collaboration between CBAHI and key stakeholders to ensure alignment between accreditation standards and strategic goals, and provide further guidance and resources to assist healthcare organizations in strategic planning.

Maintain and reinforce the effectiveness of CBAHI accreditation in driving positive outcomes and continue to encourage healthcare institutions to prioritize quality improvement.

## References

Grol, R, Baker, R, Moss, F (Eds.). (2004). Quality improvement research: understanding the science of change in health care. London: BMJ Books.

Grol, R, Berwick, D M, Wensing, M (2008) On the trail of quality and safety in health care, BMJ, 336 (7635): January 12, 2008 74-76

Stevens, D P (2005) Three questions for QSHC, Quality and Safety in Health Care, 14 (1): February 1, 2005 2-3

Stevens, D P (2007) If you haven't published your work, it's time to start, Quality and Safety in Health Care, 16 (4): August 1, 2007 242-243

gley, G J, Nolan, K M, Nolan, T W, Norman, L, Provost, L P. (1996). The improvement guide. San Francisco: Jossey-Bass.

Clarke, C L, Reed, J, Wainwright, D, McClelland, S, Swallow, V, Harden, J, Walton, G, Walsh, A (2004)

The discipline of improvement: something old, something new? Journal of Nursing Management, 12 (2): 85-96

Manning-Courtney, P (2007) Addressing the crisis in access to autism treatment using health care

improvement science, Archives of Pediatrics & Adolescent Medicine, 161 (4): Apr 414-415

Berwick, D M (2005) The John Eisenberg Lecture: Health services research as a citizen in improvement,

Health Services Research, 40 (2): April 01, 2005 317-336

Harvey, G (1996) Quality in Health Care: Traditions, influences and future directions, International Journalfor Quality in Health Care, 8 (4): 341-350

Donabedian, A (1966) Evaluating the quality of medical care, Milbank Memorial Fund Quarterly, 44 (3, Part 2): 166-206

Codman, E A. (1916) A Study in hospital efficiency: the first five years. Boston: Thomas Todd Co.

Collier, D A, Goldstein, S M, Wilson, D D (2002) Building a model of organization performance grounded in the Baldrige Award Criteria, Quality Progress, 35 (10): 97-104

Kenney, C. (2008). The best practice: how the new quality movement in transforming medicine.

New York: Public Affairs, Perseus Books Group.

Kerr,