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Sustainable Quality Improvement Initiatives in Saudi Ministry of Health Hospitals

Saud Abdullah Alodyani Alotaibi, Aiman Talal Abdulrahman Taha, Walaa Abdulrahman Mohamed Abualnaja, Hajer Mohammed Ahed Algarfan, Latifah Rashed Maeen Almutairi, Anoud Rashed Maeen Almutairi, Hussain Mohammed M Summan, Reyof Khalaf Mohseen Alenezy, Reem Masad Sawad Al-mutairi, Abdulrahman Abdullah Ghazi Alotaibi, Sara Dhahawi Awad Alruwaili, Aeshah Thaarsamer Almutairi, Bandar Abdullah Mesaieed Al Mutairi, Modhi Lafaaawad Almutairi, Nayfa Maadhad Mishaan Al Mutairi, Huda Muhammad Metleaa Almutairi, Fatimah Musim Habib Alotaibi, Manal Odah Murdhi Alanazi, Ward Abdulrahman Saleh Alamri, Nesrin Mahmoud Khalid Alali, Dalya Fayez Essa Alenazi

Corresponding Author : Saud Abdullah Alodyani Alotaibi
Ministry of Health, Saudi Arabia

Abstract: Background: The occurrence of quality enhancement project failures is a prevalent worldwide concern that manifests itself in various organizational and geographical settings. The significance of this becomes more apparent within the healthcare industry, considering the intricate and variable nature of healthcare institutions. As a consequence, healthcare environments necessitate increased intentionality and substantial endeavors to maintain the progress made in quality enhancement. In the Saudi Arabian context, the Ministry of Health (MOH) has consistently implemented various quality accreditation projects and enhancement initiatives with the aim of enhancing the performance of hospitals. These endeavors symbolize invaluable investments that are anticipated to endure and thrive in the long run.

Summary: Ensuring the long-term viability of development initiatives within MOH hospitals continues to be the primary challenge. This challenge necessitates a comprehensive examination that surpasses the confines of hospitals and takes into account the external factors that undermine their capacity to maintain progress. It is imperative to thoroughly examine the institutional environment as a pivotal aspect before attempting to implement quality improvement initiatives. Gaining insight into the institutional attributes offers a substantial panorama of the regulatory authorities that influence the execution of quality improvement endeavors within healthcare institutions.

Key Messages: This study provides an overview of the external institutional influences that impact the sustainability of development initiatives through the application of an institutional perspective. This research establishes a foundational framework for subsequent discourse regarding the mediating function of institutional powers in determining the level of sustainability of healthcare quality improvement initiatives.

Keywords: Sustainability ·Quality improvement· Institutional theory

I. Introduction

Sustainability of improvement entails preserving the benefits of implemented improvement initiatives [1], resulting in adoption and implementation within the organization. This facilitates the growth of recently implemented methodologies in pursuit of ongoing enhancement [2]. In light of this, sustainability is considered an all-encompassing notion that delineates the ongoing and dynamic endeavors required to sustain the progress made; failure to do so would render improvement initiatives futile, as they result from the phenomenon known as "improvement effect evaporation" [3]. As a result, the issue of maintaining development initiatives has emerged as a significant concern for executives and researchers in the field of quality improvement.

In his seminal work Quality Is Free, Phillip Crosby asserts that over ninety percent of quality improvement initiatives in the United States failed [4]. Beer and Nohria [5], two well-known change authors, similarly characterized the failure of transformations across various industries in the United States as a "brutal fact." Globally, a thorough survey was undertaken by McKinsey & Company, involving more than 3,000 executives from various industries, which unveiled that merely one-third of respondents reported that their organizations had achieved the desired level of performance improvement. Additional factors that precede the failure of quality development initiatives have been identified across various sectors and global regions [6]. In addition to divergent interpretations of improvement failure, growing apprehensions regarding the long-term viability of quality improvement endeavors necessitate a deeper comprehension of the intricate nature of this field. This necessitates expanding the discourse beyond the confines of an organization and taking into account the contextual factors that could impede or promote the capacity for development, particularly in the context of public healthcare organizations.

Public healthcare organizations are considered to be intricate entities due to their bureaucratic structure, interdependent networks, and political influence [7]. The level of complexity involved is a crucial factor in determining which mechanism should be utilized to accomplish the enhancement [8]. Burnes [6] emphasized the importance of expanding one's knowledge of organizations so that one can investigate the how and why of improvement, including the structure, management, and behavior of an organization. Furthermore, according to Berwick [9], quality enhancement is a "system property" that necessitates system modification in order to attain superior outcomes. Consequently, in order to guarantee effective and enduring progress, healthcare organizations must contemplate the implementation of development initiatives on a systemic level within their entirety. In light of this, a more comprehensive strategy is necessary, considering the intricate characteristics of healthcare environments. Consistent with this perspective, the general systems theory principles highlight the broader environment in which organizations function [10]. As a result, organizations are perceived as rational entities [6] and living organisms that require adaptation to their institutional environment in order to continue existing improvements [11]. The policies and actions of organizations are influenced and limited by the exogenous normative and regulatory powers that comprise the institutional environment [12]. This further highlights the role of the institutional environment, to which healthcare organizations adhere, as a mediator in determining the level of sustainability that quality improvement initiatives can maintain. Therefore, by commencing with the institutional perspective examined in this study, additional insights can be gained regarding sustainability in the context of healthcare in Saudi Arabia. This study illuminates the application of an institutional perspective in assessing the contextual influence on the long-term viability of quality development endeavors in the public healthcare industry.

II. Quality Improvement within the Saudi Healthcare Context

The inception of quality enhancement initiatives at the Saudi Ministry of Health (MOH) can be traced back to the 1990s, when the National Committee on Quality Assurance was formed to oversee primary healthcare services [13, 14]. National quality consciousness increased in tandem with these initiatives, culminating in 1999 with the inception of the King Abdulaziz Quality Award [15]. The objective of this accolade was to inspire both the public and private sectors to attain superior performance, with a particular focus on healthcare services. Notwithstanding the robust governmental dedication to enhancing healthcare standards, the Saudi healthcare system has encountered a multitude of obstacles, including but not limited to medical errors, protracted waiting periods, and substandard service provision [16]. Despite the substantial financial investment, the healthcare

system encounters suboptimal performance due to these critical challenges.
The Ministry of Health governs the Saudi healthcare system to the greatest extent [17]. Therefore, the recent appointment of a deputy minister for planning and organizational excellence is noteworthy, as it seeks to establish unique capacities that can expedite progress and attain superior quality benchmarks [18]. Subsequently, a number of enhancement initiatives were implemented in the hospitals under the jurisdiction of the MOH from 2009 to 2018 [19, 20].

Nevertheless, considering the anticipation that the improvement initiatives will endure as a novel approach to work [1], the enduring inquiry pertains to the degree to which the executed improvement initiatives are maintained. In order to address this inquiry comprehensively, it is necessary to consider the context in which improvement initiatives occur, in addition to the improvement's content. Therefore, by examining the institutional structure of MOH hospitals, one can gain additional insight into the process through which quality improvement initiatives are implemented and maintained. This necessitates additional examination of the institutional forces that influence the internal environment of hospitals and affect their capacity to implement and maintain quality improvement initiatives.

Institutional Framework of the MOH

Approximately 60% of healthcare services in Saudi Arabia are provided by the MOH [21, 22]. A service of this extent necessitates significant operational expenditures. In 2017, the MOH budget was allocated approximately SAR 83,766 424 billion to fund healthcare services [20]. This is an unavoidable outcome stemming from the MOH's expanded "large-scaled institution" structure, which grants all Saudi nationals complimentary access to the majority of healthcare services.
The Ministry of Health is dedicated to delivering preventative and curative healthcare services [18]. Multiple tiers of administration comprise a centralized hierarchy that regulates the two domains of healthcare services. The MOH's central structure delineates its accountability for various healthcare services, including regulating and monitoring operations, as well as formulating healthcare policies, healthcare program administration, and strategic planning [17]. A wide array of healthcare services, which are geographically and socioeconomically dispersed across thirteen governorates, are consolidated within this centralized framework.
In each of the thirteen governorates, the management of health care services is entrusted to a directorate of health affairs [23]. The primary authority in determining and allocating the majority of resources, as well as the strategic decisions of these directorates, is the central body of the MOH. As an illustration, according to Article 8 of the internal by-laws of the MOH, the implementation of all plans and programs established by the MOH is the duty of the provincial health-care directorates [24]. This is consistent with the directorates' functional role as executive bodies endowed with restricted authority. The health directorates supervise preventive and therapeutic healthcare services in conjunction with the central body of the MOH. The aforementioned services are administered through a diverse array of healthcare facilities, including primary healthcare centres (PHCs), hospitals, and other specialised medical centres, which are dispersed throughout each province's cities and villages.
The provision of provincial healthcare services occurs at the tertiary, secondary, and primary levels [14]. Primary healthcare centers (PHCs) comprise the primary level and serve as stewards [21–23]. They offer preventive and curative healthcare services and refer cases requiring additional management to secondary or tertiary levels. The provision of these service levels is facilitated through an extensive network of healthcare facilities that are dispersed across various catchment areas. The network comprises a combined total of 286 general and tertiary hospitals and 2,261 PHCs, which collectively offer 44,665 inpatient beds [20]. A diverse array of 256,604 personnel are employed across various administrative and healthcare functions. The institutional framework within which the MOH operates is comprised of this network of healthcare organizations. An exceptionally centralized governance structure oversees and regulates such an extensive healthcare network.

Improvement Efforts within the MOH Hospitals

The imminent structural transformation of the healthcare sector in Saudi Arabia is a direct consequence of the national transformation plan Vision 2030. This strategy is supported by the nation's most influential political figures, who are extremely dedicated to its success. The healthcare industry is participating actively in Vision

2030. "Caring for our Health" is one of the milestones associated with the theme of a vibrant society. This thematic area encompasses a multitude of strategic objectives that are designed to enhance healthcare and social services in the private and public sectors. The overarching objective of the vision is to elevate the mean life expectancy from 74 to 80 years as a result of a multitude of healthcare enhancement initiatives. Furthermore, the vision mandates that both public and private healthcare organizations enhance their quality and efficiency [25]. Several administrative and medical enhancement initiatives have been implemented within MOH hospitals in response to Vision 2030 [19, 20]. Various corporate development methodologies have been embraced to execute initiatives with the objective of enhancing service quality within MOH hospitals [26]. The aforementioned methodologies—TQM, Lean, Six Sigma, and Lean Six Sigma—have been predominantly modified to enhance the operational efficiency of specific departments, including operating rooms, outpatient and inpatient facilities, and operation rooms [26, 27]. Upon their inception, these initiatives attained exceptional achievement and were regarded as efficacious instruments for enhancing service quality in a number of MOH hospitals nationwide.

Concurrently, the MOH has heightened its endeavors to secure accreditation for its medical facilities. The pursuit of accreditation is predicated on the notion that adherence to standards grounded in empirical evidence will result in elevated standards of service quality and a secure working environment [28]. As a result, accreditation programs have been implemented within MOH hospitals as a means to stimulate quality enhancement. The establishment of the Central Board for Accreditation of Healthcare Institutions (CBAHI) was intended to ensure that healthcare facilities consistently adhere to quality and patient safety standards [29]. Furthermore, its objective is to evaluate healthcare services in accordance with pre-established quality benchmarks.

The overarching inquiry regarding the sustained effectiveness of implemented quality improvement initiatives, such as accreditation programs, in relation to the advancement of healthcare transformation strategy and the overall quality of healthcare outcomes is a significant concern. The subsequent institutional analysis offers additional insight into the degree to which these initiatives are operationalized and maintained within the institutions of the MOH.

Analysis of Institutional Barriers to Sustain Quality ImprovementInitiatives

In order to conduct a more comprehensive examination of the obstacles institutionalized, it is imperative to highlight the possible contradiction that exists between the institutional and contingency theories [30]. This can be ascribed to the divergent assumptions that form the foundation of each theory regarding improvement initiatives. The fundamental tenet of the contingency theory [31, 32] is that an organization can attain high performance by aligning its internal attributes with external contingencies. In contrast, the institutional theory posits that in order to gain support, an organization must establish its legitimacy [30]. When an organization complies with the regulations and prerequisites of its institutional milieu, it attains legitimacy [33, 34].

In the context of development, institutional principles propose that organizations adopt improvement initiatives to bolster their legitimacy, which may ultimately increase their likelihood of survival [35]. In contrast to the contingency theory, the institutional theory has faced criticism due to its prioritization of conformity and legitimacy over the attainment of genuine organizational effectiveness [36]. The existing governance framework of the MOH is an illustration of how legitimacy and conformity-based powers hinder the sustainability of quality development initiatives. The top-down hierarchy of the MOH and government regulations are significant institutional forces that exert control over hospitals. The repercussions of these institutional powers are delineated in the subsequent aspects.

Centralised Governance

A centralized organizational hierarchy [17–39] that employs coercive isomorphic power [40] governs the extensive network of MOH hospitals. This hierarchy incorporates organizational structures such as policies, routines, values, and regulations, which collectively establish overarching principles that direct the conduct of organizations [41]. Organizations are being subjected to these institutional elements with little regard for the quality of the task at hand [36]. This particular viewpoint compromises efficacy in favor of attaining formality. This circumstance is exemplified by the manner in which the quality improvement initiatives are presently being executed in the institutions of the MOH.

Numerous operational obstacles plague the centralized governance of the MOH, eroding the quality of healthcare services provided. The aforementioned issues consist of escalating difficulties related to medical errors, extended periods of waiting, substandard service quality [16], limited bed capacity, and inadequate utilization rates [22–42]. Recent MOH statistics indicate a low occupancy rate of 60% of the available beds and a low hospital bed coverage of 13.2 beds per 10,000 persons [20]. Furthermore, these facts call into doubt the efficacy of the MOH's efforts to enhance the performance of hospitals.

The findings of Hassanain et al. [26] regarding a clinical improvement initiative that implemented lean methodology were presented. Surgical pathway improvement was an initiative that sought to enhance patient flow and utilization in operating rooms located in various MOH facilities nationwide. One-third of the institutions that reportedly implemented these initiatives have not met the anticipated level of performance. Hassanain et al. (43) documented in a separate assessment study the ineffectiveness of establishing performance improvement units to implement lean 6 sigma and change management methodologies throughout thirteen governorates. It has been reported that nine months after their inception, the established performance enhancement units have reverted to their initial level. The failure was ascribed to the initiative's inadequate sustainability, given that while it was initially executed effectively, it necessitated additional dedication, authority, and instruction from the team members in order to maintain its initial triumph.

Top-Down Approach to Improvement Initiatives

The implementation of quality development initiatives is mandatory in provincial healthcare settings, including hospitals, through a top-down approach. A unilateral improvement approach disregards contextual variations and health indicators that determine the specific improvement requirements for each province and guide their subsequent efforts. This strategy is in opposition to the contextual differences that exist among the MOH institutions situated in vast geographical regions. The findings of the 2017 household health survey unveiled notable discrepancies among provinces with regard to various health status indicators and the incidence rates of chronic diseases, road traffic accidents, smoking, and cancer [44]. Furthermore, an uneven allocation of healthcare professionals and services, as well as inconsistencies in the quality of healthcare services provided, are observed throughout the provinces [45]. Therefore, there is variation among the MOH facilities in terms of their technical and scale efficiency (where inputs are compared to outputs) across different provinces [46]. The efficacy of the current coercive imposition of quality improvement initiatives on MOH hospitals, which face a variety of obstacles, is called into question by these factors.

In addition to the quality aspects of the work at hand, hospitals are obligated to adhere to the rules and requirements of the CBAHI standards and MOH regulations through the coercive imposition of improvement initiatives [33, 34]. Upon reflection of these facts and in consideration of the existing mandatory mechanism for quality development initiatives, it becomes apparent that MOH hospitals implement such initiatives primarily for the sake of legitimacy and formality, rather than with the intention of enhancing service quality. In this particular scenario, the MOH hospitals primarily implement quality improvement initiatives to comply with the requirements of the highest regulatory bodies, placing less emphasis on the actual outcomes of improvement. In order to address these challenges in an efficient manner,the MOH institutions would need a decentralized governance model that grants them autonomy and internal capability. This approach would provide enhanced flexibility in accordance with the principles of contingency, allowing hospitals to recognize and implement development initiatives that are tailored to their particular circumstances.

Compulsory Accreditation Schemes

In Saudi Arabia, the CBAHI accreditation has been implemented as a compulsory program, requiring both public and private healthcare institutions to meet its criteria [28]. This mandatory accreditation stands in opposition to the majority of international accreditation programs [47, 48], which establish a framework for voluntary ongoing improvement. The Saudi Council of Ministers initiated legal proceedings in 2013 to require accreditation for all MOH hospitals as a condition for the renewal of their operating licenses [29]. As a consequence, accreditation programs evolved into national initiatives that exert additional coercive regulatory authority over MOH hospitals.

Variation in the extent to which the voluntary and coercive approaches to accreditation result in improvements has been discerned through comparison. In their systematic review, Alkhenizan and Shaw [49] compiled voluminous evidence from around the world to support the notion that a number of voluntary international accreditation programs are positively associated with the enhancement of health care services. This encompassed a variety of clinical procedures, including pain management, ambulatory surgical care, trauma and myocardial infarction treatment, and infection control.

Conversely, in the context of Saudi Arabia, empirical evidence regarding the beneficial effects of current coercive accreditation initiatives on hospital quality is scarce. A recent comparative analysis of 42 quality-of-care indicators across 88 MOH hospitals was undertaken by Alasmari [50]. The findings of the study were unexpectedly high: non-accredited hospitals achieved superior quality indicators in comparison to accredited hospitals. Almasabi and Thomas [28] conducted a study encompassing a sample size of over 669 employees and 12 senior managers who were employed in three MOH-accredited hospitals. The accreditation had no effect on the quality indicators of the hospitals under evaluation, and no monitoring mechanism has been established to evaluate fundamental outcomes, according to the study.

The discrepancy between the results obtained from national and international accreditation initiatives calls into doubt the efficacy of the coercive strategy in which accreditation was manipulated by the government as a regulatory instrument. This is in opposition to the normative function of accreditation programs, which is to contribute to the dissemination of professional standards as a non-governmental organization [10–49, 51]. A mandatory approach of this nature embodies coercive institutional power in that hospitals are obligated to comply with a set of standards imposed centrally, irrespective of contextual factors including bed capacity, infrastructure, and scope of service. It is critical to take into account these contingencies as significant determinants before implementing accreditation initiatives. In order to comprehend and effectively manage these unforeseen circumstances, hospitals must maintain a degree of autonomy that enables them to adapt and maintain the accreditation initiatives.

Research Proposition for Adopting an Institutional Perspective

This article has provided insight into the application of an institutional lens in examining the contextual influence on the sustainability of public healthcare quality improvement initiatives. This viewpoint has been utilized for quite some time to comprehend a vast array of organizational reforms and change initiatives [52]. It implies that organizations may adopt change initiatives in order to bolster their legitimacy, which may ultimately improve their prospects of survival [35]. When an organization complies with the regulations and prerequisites of its institutional milieu, it attains legitimacy [33, 34]. Conformance is defined as "the extent to which an organization adheres to the prescribed institutional norms regarding the organizational structure, routines, and systems" [53].

The institutional environment comprises a collection of homogeneous and interconnected organizations that possess comparable attributes. In order for an organization to be considered legitimate in its institutional environment, it must undergo institutional isomorphic change, which compels it to resemble other organizations in which it conducts business. This transformation could be prompted by normative, coercive, or mimetic forces [40]. Every single one of these forces significantly affects the manner in which an organization functions within its institutional setting. Therefore, comprehending these forces furnishes service organizations, such as healthcare settings, with a practical framework for analyzing the institutionalization of improvement efforts.

The service improvement literature has predominantly concentrated on routine work processes and back-office operations [54]. However, healthcare presents unique environmental factors that must be taken into account when devising improvement initiatives. The focus on healthcare enhancement is a relatively new development, and the healthcare system is intricate, presenting numerous obstacles to the fundamental set of success factors and enablers [55, 56]. Enhancing the healthcare sector requires the collaboration of numerous actors [57]; it is not possible for singular individuals or elites to effect change [9]. It has been suggested that the complexity of improvement and the diversity of healthcare organizations, where prescriptive methods for managing improvement are unlikely to succeed, contribute to the comprehension of the context surrounding healthcare quality improvement [58].

The unique environment created by such a complex and interdependent context is dominated by numerous institutional forces. Despite the considerable amount of research that has been conducted on various contextual conditions of improvement [58–60], to the best of our knowledge, there is currently no study that examines the sustainability of quality improvement initiatives in the healthcare sector through the lens of an institution. Hence, this comprehensive outline sets a foundation for subsequent discourse regarding the intermediary function of institutional powers in determining the level of sustainability for healthcare quality improvement initiatives.

III. Conclusion and Recommendations

This summary provides an account of the institutional setting in which the hospitals of the MOH operate. This milieu embodies the external regulatory forces that influence and restrict the quality improvement endeavors within these medical facilities, thereby exerting a critical impact on their implementation and long-term viability. The MOH operates under a centralized organizational structure comprising an excessive number of healthcare settings that provide comprehensive healthcare services. These services are distributed across several provinces that exhibit diverse socio-demographic attributes. The existing bureaucratic governance within the dispersed MOH facilities is insufficient to facilitate the execution of quality improvement initiatives. The restricted autonomy and scope of authority that healthcare settings, including hospitals, are granted hinders their capacity to implement and maintain improvement initiatives. Similarly, these healthcare facilities encounter difficulties in maintaining the results of quality accreditation initiatives as a result of the mandatory implementation strategy that disregards the contextual differences between facilities.

As a consequence, it is anticipated that the institutional perspective will furnish a viable framework for analysis that can be employed in scientific and applied research to examine the institutional influences that impact the implementation and long-term viability of quality improvement initiatives in the healthcare industry at large. The centralized governance and reduced autonomy provided to MOH hospitals, in addition to the top-down improvement approach, are public policy challenges that must be acknowledged in order to support the improvement capability of these facilities. These concerns embody public policy dilemmas that necessitate intentional evaluation at the macro level. Alternatively stated, those in control of the healthcare transformation strategy must establish the new models of care with a greater degree of care. In terms of its long-term effects, mandatory accreditation's contribution to the MOH institutions' capacity for improvement also requires additional evaluation.

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