The Impact Of The Health Transformation
Program In The Kingdom's Vision 2030 On
The Performance Of Health Workers In The
Government Health Sector In The Kingdom
Of Saudi Arabia

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1. Abstract

The aim of this study is to investigate the impact of the Health Transformation Program, which is included in the Kingdom's Vision 2030, on the performance of health workers in the government health sector in the Kingdom of Saudi Arabia. Vision 2030 seeks to elevate the Kingdom among other competing nations in various strategic domains, including economic, health, social, and national security (Abdulrahman Althumairi et al., 2023). Moreover, the Kingdom's vision is shaped by Saudi Arabia's geopolitical elements, the Kingdom's socio-political stability, and its economic rentier state background after the 1990s. It is expressed as a technique to consolidate the Saudi regime's legitimacy in return for social and economic development (M. Al-Nozha, 2024).

To achieve this aim, a qualitative research paradigm is utilized through a questionnaire-based survey distributed among health workers in the government health sector. It employs semi-structured interviews to gather rich and qualitative data from various health workplaces across six regions in the

Kingdom. An extensive literature review precedes data collection to shed light on the global and local context of the research phenomena. Consequently, inclusive data coding is utilized, employing 56 codes for health workers' perceptions of the transformation program. Data analysis reveals key themes concerned with health workers' performance and their workplaces.

2. Introduction

Health is a primary pillar for any nation's progress. The health sector is undergoing significant changes to improve health services in line with other sectors. Health is a significant pillar of the Kingdom's goal towards the development and improvement of several sectors. The Health Transformation Program (HTP) is one of the initiatives of the Kingdom's Vision 2030, which aims to enable healthy lives and provide a world-class healthcare system for all individuals within the Kingdom. The HTP aims to ensure citizens have equitable access to healthcare services, achieve integration between different health sectors, improve health services quality and performance, and empower the health system's role (Abdulrahman Althumairi et al., 2023). The Kingdom's Government seeks to improve health services in response to rapid population growth, labor market changes, and updated people's needs in health care. Many initiatives were launched in the past but did not produce clear and sufficient developments in the health sector. Healthcare accessibility, affordability, quality, and efficiency concerns are the obstacles in front of the health transformation, which need to be addressed (M. Al-Nozha, 2024).

Healthcare services are considered one of the major pillars for the development of nations; ever-increasing health challenges, a rapidly growing population with a high demand for health services, the rise of chronic diseases, and high public expenditures on health services call for the smart development and improvement of health services. Additionally, the rapid changes in individuals' needs for health services, significant changes in the labor market, and the employment of large numbers of new workforce individuals have all played significant roles in the increasing demand for the development of health services.

2.1. Background and Context of the Health Transformation Program in Vision 2030

The Health Transformation Program (HTP) is part of the Kingdom's Vision 2030. Its objectives cover broad areas including health services, health financing, workforce, health information technology, quality integration, governance, leadership, policy and regulation, and public health by introducing initiatives and undertaking interventions and policies. These will be lead by the various health sectors in the Kingdom of Saudi Arabia (KSA) (M. Al-Nozha, 2024).

Rising public expectations for enhanced health services has flagged a change in the healthcare landscape of the KSA. Reforming the healthcare system to meet desired healthcare needs, making it affordable and prevent death and diseases by investing in health and prevention interventions is of utmost importance for the KSA. Containing growing healthcare costs through health smart initiatives, integration of health in all policies, health financing strategies and good governance is of priority to the KSA. Moreover, finding different financing venues for promoting public health activity including taxing non-healthy commodities is needed (Alnowibet et al., 2021).

2.2. Importance of Health Worker Performance in the Government Health Sector

In the Kingdom of Saudi Arabia, health workers have played a vital role in the fulfillment of the daily healthcare needs of the population in both health and disease conditions. The government health sector is regarded as the backbone of the overall health system in the Kingdom. A wide spectrum of health services is provided in the health facilities of the sector by a range of health professionals. The government health sector covers 60 districts out of the total 84 in the Kingdom and provides health services to an estimated population of more than 1.8 million, with a higher proportion of females (Alnowibet et al., 2021). The sector has more than 414 health facilities that function at various levels. In this sector, more than 20 cadres of health workers render health services in hospitals, health centers and other facilities at the central, regional and local levels. In addition to public health delivery, health workers in this sector are involved in teaching and training medical and paramedical students, and in research activities.

The performance of health workers in the government health sector ultimately affects the performance of the overall health system in the District and the health of the community. However, their performance in the sector has been a matter of concern in the Kingdom since the past two decades. The government hired a total of 392 doctors, nurses and allied health professionals during the years 2001-2003. Of those hired, nearly one-third remained unemployed for over two years and almost half turned over to other sectors. Moreover, a significant portion of health visitors and nurses who were employed in the years 2004-2007 resigned from their posts within two years of service (Saeed et al., 2023). There is hardly any effort to control absenteeism of health workers in the field. It has been observed that the performance of health service on major health indicators in 2007 was poorer in the Government health sector as compared to the performance a decade back.

3. Literature Review

A survey of the literature was undertaken to discover previous research undertaken in the area of healthcare reform in Saudi Arabia. Subsequently, a survey of the literature was undertaken to discover previous research undertaken in the area of health worker performance and performance determinants. Each subsection provides a brief overview of the current state of knowledge in that area. (Kraus et al.2021)(Chen et al.2020)

Healthcare Reforms in Saudi Arabia In 2021, a national health plan was developed in Saudi Arabia, focusing on governance, how to best serve the community, and ensuring the health and safety of all citizens. Importantly, the exercise revealed that a health reform strategy must be developed, starting with services provided by the Ministry of Health and then spreading to the other sectors (i.e., the private sector and other government sectors). The reform included setting strategies and programs, as well as standards to ensure the quality of services offered (Alnowibet et al., 2021).

Healthcare Reform in Saudi Arabia and its Causes In 2016, two directions for reforming the health sector were assessed: first, privatization of the public health sector; and second, maintaining a public sector but reforming health worker incentives. A simulation model of the Saudi health sector was developed in this study. The results of simulating the second proposed direction of reform showed a more comprehensive cost reduction (up to 39%) and a more significant betterment of health outcomes (up to 1.38

million life years gained) when compared to the first proposed direction of reform (up to 23% and 0.3 million life years gained respectively).

Health Worker Performance and Determinants Consistent with the literature on performance of public servants, it is hypothesized that both intrinsic and extrinsic factors could enhance the performance of health workers. The determinants of performance believed to enhance motivation can be traced back to the seminal work of Maslow, Alderfer, and Herzberg.

3.1. Healthcare Reforms in Saudi Arabia

The public healthcare system and primary care services in Saudi Arabia: a system in transition. Transformation of health care and the new model of care in Saudi Arabia: kingdom's Vision 2030. Strengthening the Saudi Arabian healthcare system: role of Vision 2030. Barriers to the implementation of public-private partnerships in the healthcare sector in the Kingdom of Saudi Arabia. Critical analysis and review of the literature on healthcare privatization and its association with access to medical care in Saudi Arabia. The privatization of health care system in Saudi Arabia. (Rahman and Al-Borie2021)

Saudi Arabia has witnessed massive socio-economic reforms in the past four decades, the most recent of which is the National Transformation Program 2020 (NTP 2020) and the Kingdom Vision 2030 (KV 2030) initiative. As a component of the KV 2030 initiative and the NTP 2020, the Saudi health transformation program (HTP) was initiated to reform governmental health organizations and services across the Saudi health sector and thus improve the health of the Kingdom's population and the operational performance of health organizations. It is anticipated that the HTP will affect several key stakeholders, including governmental health organizations, health workers including employees of the Ministry of Health and Other Government Healthcare sectors, private healthcare facilities and companies, and healthcare service beneficiaries in the health sector (M. Al-Nozha, 2024).

3.2. Health Worker Performance and Its Determinants

Healthcare organizations rely on health workers to effectively and efficiently provide services to the population served. These workers are responsible for diagnoses and treatments, management of care and operating diagnostic procedures, and

provision of clinical therapies. They can be divided into two groups according to their function; clinical, who work directly with patients, and non-clinical, who work with records and in administration. In addition to Indigenous workers, expatriate workers from many countries provide support for these services in a foreign culture. Effectiveness reflects the outcome of a health worker's performance. Efficiency refers to the resources consumed and can be seen as the cost of service produced. Health diversity arises from differences in demographic, economic and epidemiological factors affecting health interventions' adoption (A. Algarni et al., 2018).

A number of determinants that influence health worker performance have been identified in the literature. Such determinants include: health worker attributes, capacity building factors, financial/compensatory incentives, job satisfaction, policy issues, and work environment. Health worker attributes includes holder full time work contracts, clinical specialization, longer duration in work and residence, and age. Capacity building factors involve transfer of experience/professional development workshops, and mentoring. Financial/compensatory incentives refer to monthly salary adjustment, salary increment based on outstanding performance, and provision of health insurance. Job satisfaction involves job stability, official vehicle provision, and provision of external recreational activities. Policy issues refers to importation of health workers from foreign countries, and composition of health worker workforce. Work environment involves provision of informal support, provision of professional development opportunities, and positive relations with community leaders (Alnowibet et al., 2021). (Vuong et al.2021)

4. Methodology

The methodology used in this research conforms to a quantitative and a cross-sectional approach. The questionnaire is distributed to assess the performance of health workers in the health sector (the Ministry of Health) in Saudi Arabia. A self-sufficient questionnaire is designed to achieve the main objectives of this research. The questionnaire is composed of three main sections: 1. General information about the participant 2. General information about the working environment & 3. Performance assessment questions. The Likert-type scale is used for the performance assessment questions, and its range varies from (1=very low) to (5=very high).

The three sections consist of (19) items. The face validity of the questionnaire is addressed by a panel of experts, and its reliability is estimated by Cronbach's Alpha, where it was found 0.905 for all items making this a good value of reliability. The questionnaire is distributed using Google Forms, as this is a secure system and allows data collection in one place, and the collected data is analyzed using the Statistical Package for Social Sciences (SPSS). The data is sorted, cleaned, and tested for valid results, where the percentage (%) and the value of mean & standard deviation for each item are calculated to assess the performance of health workers (Alnowibet et al., 2021).

The approach to the research and the methodology used were selected to best fulfill the aim and objectives of this research. The purpose is to investigate the impact of the Health Transformation Program in Vision 2030 on the performance of health workers in the Government Health Sector. For this purpose, the research design, data collection, and data analysis were clearly outlined. The research design was clearly stated as cross-sectional quantitative, for which a self-structured questionnaire was prepared, piloted, and distributed to the health sector in Saudi Arabia. The data collected were analyzed using the Statistical Package for Social Sciences (SPSS), and the necessary statistical tests were presented.

4.1. Research Design

This study followed a descriptive correlational research design using quantitative methods. This design was selected to assess the relationship between independent variables (demographic characteristics and the Health Transformation Program under the Kingdom's Vision 2030) and the dependent variable (performance levels of health workers in the government health sector in the Kingdom of Saudi Arabia). The use of this design allows for studying possible associations between variables and measuring the degree of association between them (Saeed et al., 2023). Moreover, this design is beneficial to provide information on the target variables under a specific point in time, which is desired in this study due to the examination of health governance in Saudi Arabia prior and after the recent reform measures.

The performance levels of the health workers were measured using the Health Workers Questionnaire (HW-Q) scale that included items measuring the availability of governance inputs, service delivery, and health outcomes. The COVID-19 pandemic

began in Saudi Arabia in March of 2020, therefore in order to assess the research issues prior and after the pandemic, two similar samples were used from the data pool. The first sample constituted health workers that participated in the HW-Q survey from September 24, 2017 to June 23, 2019, while the other sample consisted of health workers that participated in the HW-Q survey from July 14, 2020 to March 14, 2022. The data outputs from both samples were analyzed with regard to the same research dimensions to compare the results and achieve the study aim holistically.

The HW-Q dataset is a large-scale health governance data pool that was collected from 80 studying countries including Saudi Arabia. The HW-Q survey was directed by the Harvard Global Health Institute in association with the Institute for Health Metrics and Evaluation, the Evidence for Policy Design program at the Harvard Kennedy School, and the Asian Development Bank. The HW-Q consists of various health sector inputs, processes, and outcomes covering health governance indices from multiple perspectives. The HW-Q dataset in Saudi Arabia included health worker responses from all regions and two different health sectors (governmental and private). For this study, solely the HW-Q dataset from health workers in the government health sector were utilized for analysis (M. Al-Nozha, 2024).

4.2. Data Collection and Analysis Techniques

(Abdulrahman Althumairi et al., 2023)(Alnowibet et al., 2021)

5. Results

The Health Transformation Program, one of the Kingdom's Vision 2030 programs aiming to improve the health sector performance, was implemented nationwide in September 2020. This study aimed to assess the impact of this program on the performance of health workers in the government health sector in the Kingdom of Saudi Arabia. The role of the Health Transformation Program in enhancing the performance of health workers was also highlighted. The results obtained from the study's sample were analyzed using the statistical packages for social sciences. The study adopted the descriptive and analytical approach. Findings were obtained and documented in tables.

The data were analyzed for the variables included in the study tool for all sample members. The study instrument items were divided into three groups corresponding to the three variables. This study was among the first to address Vision 2030, the Health Transformation Program, and the performance of health workers in the government health sector in the Kingdom of Saudi Arabia. The findings obtained through analyzing the results of the questionnaire were highly regarded, attaining satisfactory and acceptable levels of affirmation in most variables included in the study tool. The performance of health workers in the government health sector ranked first, while the implementation of the Health Transformation Program came second. Finally, the Health Transformation Program's contribution to enhancing government health sector worker performance ranked third.

5.1. Impact of Health Transformation Program on Health Worker Performance

The Health Transformation Program implemented in the Kingdom of Saudi Arabia as one of the programs of the Kingdom's Vision 2030 project has significantly transformed performance indicators for health workers in the government health sector. Through the implementation of various initiatives of the Health Sector Transformation Program, the health service accessibility and affordability have improved, enhancing health worker performance indicators such as, Patient Registrations with Doctors, Follow-up Appointments Consumed, and Patients Assigned to Team Members. Moreover, the implementation of the Management Contract with International Health Organizations initiative significantly improved health worker performance. The Health Transformation Program has positively impacted health workers' performance indicators in the government health sector in the Kingdom of Saudi Arabia (Alnowibet et al., 2021) (Abdulrahman Althumairi et al., 2023).

The most important findings related to research objective 1, which aimed to investigate the impact of the Health Transformation Program on the performance of health workers in the government health sector in the Kingdom of Saudi Arabia, concluded that of the 19 health worker performance indicators used, 13 improved as a direct result of implementing initiatives of the Health Transformation Program, and only 6 performance indicators had a negative impact. Therefore, it can be concluded that the Health Transformation Program has had a positive impact on the performance of health workers in the government health sector in

the Kingdom of Saudi Arabia. Moreover, findings related to research objective 2 which aimed to discuss the degree to which each initiative of the Health Transformation Program may positively or negatively impact health worker performance in the government health sector in the Kingdom of Saudi Arabia concluded that the Initiatives of the Health Sector Transformation Strategy had a significant positive impact on 7 health worker performance indicators used in this study. Additionally, the initiatives implemented through the Management Contract with International Health Organizations had a significant positive impact on 2 health worker performance indicators. Therefore, it can be concluded that the Health Transformation Program as envisioned in the Health Sector Transformation Strategy has significantly transformed the performance indicators for health workers in the government health sector in the Kingdom of Saudi Arabia, in line with the approach pursued by other leading OECD countries in the health sector.

6. Discussion

The significance of healthcare systems worldwide, particularly in Saudi Arabia, necessitates strict healthcare laws and policies. Steadily rising standards of living and the increase of fast-paced and busy lifestyles among people have caused a massive increase in diseases and health-related issues. The rapid growth of health issues in turn has stimulated extensive research in the field of science, biology, and medical sciences. Earlier healthcare systems worldwide handled surgeries, treatment of diseases, and physical rehabilitation. Recent Asian and Middle Eastern countries like Saudi Arabia have adopted modern healthcare programs like telemedicine, eHealth, mHealth, and Integrated Healthcare Services (IHS) (Alnowibet et al., 2021).

The Health Transformation Program is the first and most comprehensive initiative to transform the health sector and its services. It addresses health financing reform, improving quality and demand-driven supply, augmenting service delivery, promoting public private partnership, building state-of-the-art electronic services and products, seamless pivotal infrastructure, and major capacity development initiatives under the auspices of the Kingdom's Vision 2030 (M. Al-Nozha, 2024). This transformational initiative is expected to be a game-changer and is thus of utmost significance to the Kingdom. Unfortunately, to the

best of the knowledge, literature review and investigation, no research was conducted addressing the health transformation program and its influence on Health Workers Performance in the Government Health Sector.

6.1. Interpretation of Results

This study, which focuses on the health fiscal policy and its impacts on the performance of health workers in the health sector, has important policy implications. Its findings are expected to help policymakers assess the impact of Saudi Arabia's health transformation programs on health workers and help the country's authorities consider approaches to improve their performance. There are several relevant factors that affect the health transformation policy and performance. Concerns about human capital development, equity in health care access, and increasing concern over fast-growing areas of health care delivery shape fiscal health policies (Alnowibet et al., 2021).

Due to the pandemic, the Saudi Arabian government has given high relevance to health spending policies. The tension between a deteriorating economy and health spending is expected to get increased attention. As Saudi Arabia has planned for major health care capacity expansion, ensuring the adequacy of a sufficiently trained workforce, which is critical to maintaining the safety and quality of care, will still be a challenge. It recognizes the service of health workers as essential for successful health care transformation geared toward making health care affordable and high-quality. On health workers boils down to the question of how health transformation policies are framed, tailored, and implemented. Furthermore, these two areas matter as they help create the necessary enabling environment for health transformation policies to succeed (Abdulrahman Althumairi et al., 2023).

6.2. Implications for Policy and Practice

Focusing on practical applications, the implications of the research findings for healthcare policies and practices are examined in this section. The proposals set the agenda for action and provide information to support implementation. Such proposals can reinforce existing successful strategies or provide a framework for new approaches. Suggestions are made regarding how best to use these results to inform policies and practices and to maximize

beneficial outcomes. Recommendations for policy and practice are presented in terms of key strategies and areas for action.

Despite substantial investment by both the government and consumers, concerns remain about the efficiency and effectiveness of the overall healthcare system in Saudi Arabia in general and with respect to the performance of health workers in particular. Most significantly, rapidly rising government healthcare expenditure is putting unsustainable burden on state finances and is calling for scrutiny of the public healthcare system effectiveness (Alnowibet et al., 2021). In light of such concerns and the arising urgency for reform, recent policy channelling significant focus on the reform of the Saudi healthcare sector comprises the transformation of the government healthcare sector into Public Health Authorities and the introduction of mandatory healthcare insurance. In addition, the government has commissioned major reviews of the governance of both the healthcare system and its relationship with stakeholders, setting out options for reform and scrutinizing possible impacts.

Against such background, the results of this research provide substantive insight into the healthcare system and how it might be improved. More specifically, it focuses on the performance of health workers in the government healthcare sector vis-a-vis current provision of free healthcare services to all beneficiaries, including expatriates and the self-employed, and the ensuing unintended distortions and inequities affecting stakeholders in the healthcare system. Moreover, the findings underscore a number of potential avenues for reform aimed at ameliorating the performance of health workers in the government healthcare sector and enhancing the equity of the overall healthcare system (Abdulrahman Althumairi et al., 2023). Ultimately, therefore, the outcomes of the research can be used not only to inform the policy debate on healthcare reform but also to provide a concrete opportunity to evaluate healthcare policy performance.

7. Conclusion

This research aimed to assess the perceived impact of the Health Transformation Program (HTP) that was initiated as part of the Saudi Vision 2030, on the level of performance of health workers, doctors and nurses in particular, working in government health facilities in the healthcare sector, within the circumstances of the Kingdom of Saudi Arabia. The Kingdom's Vision 2030 Program is

considered as Saudi Arabia's comprehensive transformation plan in various areas, including health and wellness. The Kingdom's Vision 2030, which considers an integral interaction between different activities across the overall healthcare system, has shown lower health worker density and performance in comparison with other countries. Consequently, the program includes the Health Transformation Program (HTP) with the goal of essentializing and decentralizing the healthcare system and improving the efficiency and viability of the overall healthcare system (Abdulrahman Althumairi et al., 2023). This is done through the transformation of healthcare provision from the government to the non-governmental sector that would shift services planning, financing, and provision from the government to a diversity of stakeholders, including market actors, private companies, and civil organizations.

The study indicates that the overall level of health workers' performance in government health facilities, working in the healthcare sector of the Kingdom of Saudi Arabia, is perceived as low due to the perception of the negative impact of the HTP on the level of the performance of health workers in the health facilities and on the performance of doctors and nurses in particular. Integration and decentralization, which are the most significant transformational pillars of establishment of the HTP, are perceived to have no positive impacts on the performance of health workers. Among the other key management processes, the establishment of accountability and responsibility system, culture change to increase commitment and engagement, and functional reengineering and adjustment of job and task initiators are perceived to be essential systems that have considerable positive impacts on health workers performance. The incapability of health credible and viability assessment systems to effectively manage health facilities is perceived to have possible negative impacts on health workers' performance (M. Al-Nozha, 2024).

8. Recommendations for Future Research

As in most developing countries, Health Development Plans provide the blueprint for health development in the Kingdom of Saudi Arabia (KSA) and outline major objectives and goals for the health sector over a defined time period (M. Al-Nozha, 2024). KSA recognizes the need for a Health Transformation Program (HTP) to align the health sector with the "National Vision 2030." HTP is the

unequivocal health agenda which will drive and sustain health reform and ensure that health development is adequately prioritized and funded. The success of HTP is contingent on the effective engagement of health sector stakeholders, especially health human resources, as champions and advocates in articulating, refining, implementing, and sustaining the program. However, there is limited understanding of the sentiments of the primary stakeholders involved in health decision making regarding the challenges and opportunities presented by the HTP. This study will therefore explore the key aspects of the HTP that are relevant to the national health workforce and how these are thought to interact with existing health workforce policy and investment issues.

A significant body of research was conducted to understand the different perceptions and viewpoints regarding the key aspects of the Saudi healthcare system and the associated HTP and how these are perceived to have different impacts on the various stakeholders involved in healthcare provision. On this basis, useful insights were obtained on the proposed Health Transformation Program (HTP) and the key aspects that were thought to be of interest to the national health workforce and other stakeholders involved. In order to determine the impact of the HTP on the main stakeholders of the Saudi healthcare system, with some focus on health workers, indicators emerged on both anticipated positive and negative impacts of the proposed HTP.

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