

## Review Article

# Health Care Structure and Organizational Structure of Public Health System

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**Abstract:** Utilizing existing data, we inspected the organizational design of the Saudi Arabian health framework: its demography and history, head health pointers, organization and management, type and dissemination of offices, monetary base, and the effect on it of the Haj. We noted duplication of administrations, lacking coordination between a few health industry areas, and the requirement for a more broad and levelheaded health place network with further developed data frameworks and data assortment. We additionally noted extension for a more prominent job for the private health area and expanded collaboration among it and the public area to further develop health administration conveyance and populace health.

**Keywords:** Organizational, Public health, coordination.

## Introduction

Numerous nations across the world are attempting to further develop healthcare quality, contain or control costs, and give admittance to healthcare to their residents. Much has been expounded on United States and European battles to adjust quality, cost, and admittance to healthcare. The circumstance in the Kingdom of Saudi Arabia is less notable, however is unmistakably interesting, with captivating changes occurring that will fundamentally change the manner in which healthcare is given<sup>1</sup>. The nation has offered complete, widespread access for a long time, and presently, because of spiraling expenses and view of bad quality, is fundamentally transforming the healthcare market by presenting private health protection, fee for-administration medication in legislative hospitals, and the privatization of hospitals<sup>1,2</sup>.

Healthcare in Saudi Arabia presently is given for nothing to every Saudi resident and exiles working in the public area, fundamentally through the Ministry of Health and expanded by other administrative health offices. The public authority expects that ostracizes working in the private areas have some degree of healthcare inclusion paid by their bosses. Healthcare has been viewed as a "right". Healthcare in Saudi Arabia has been supported essentially by public (75%) or cash based consumptions (around 25%). What has been unmistakable has been the low degree of private protection associated with the arrangement of healthcare. Practically each of the private uses have been cash based installments for administrations in private hospitals and facilities. Legislative financing is distributed through yearly spending plans to individual services and projects. Illustrious declarations might be given for distributions of extra subsidizing for extraordinary health projects and tasks<sup>3-5</sup>. There presently exist not very many specific organizations managing medical examination. The main since a long time ago settled medical logical examination community is situated at the King Faisal Specialist Hospital and Research Center (KFSH & RC) which accepts its

financial plan through the clinic from the public authority. Research concentrates fundamentally in four regions: malignant growth, hereditary qualities, cardiovascular illnesses, ecological health and irresistible infections.

The Kingdom of Saudi Arabia (the KSA) is notable for its oil and gas saves and as the origin of Islam, yet its accomplishments in further developing health frameworks and populace health might be overlooked. English language writing on Saudi health frameworks and populace health measurements is meager; more difficult to find actually are concentrates on which give significant examinations the USA. The KSA health framework change in the beyond sixty years is amazing and acquires incredible improvement Saudi Arabia's populace health. We utilize a relative strategy to cause to notice likenesses and contrasts in health frameworks and their effects on chosen health results between the KSA and the USA utilizing the WHO's 6 Health System building blocks as a structure for this correlation. Chosen health results for the correlations incorporate future upon entering the world and at 65 and newborn child and maternal death rates. The USA is picked for this correlation in light of the fact that higher GDP per capita spending isn't comparable all the time with better health results; as well as spending, the health framework arrangement and execution impact health results. Considering that the KSA has a public health care framework, though the USA doesn't have public health protection however a blended health framework worked by public and private organizations, the WHO's 6 structure blocks offer normalized markers that permit examinations between nations. The 6 structure blocks are administration conveyance, health labor force, health data framework, admittance to medicines and innovations, health framework financing, and authority/administration<sup>6</sup>.

Data connected with the health framework history in the KSA was gotten from the Saudi Ministry of Health (MOH) site and a writing search utilizing electronic databases (PubMed and Google Scholar) utilizing the accompanying catchphrases: health framework, Saudi Arabia. We made graphs and tables utilizing the data disconnected from publications of the WHO, World Bank, UNICEF, and the Saudi MOH. Because of the restricted accessibility of Saudi data, the relative investigation concentrate on period was limited to 1960-2019. In view of this writing audit, a timetable was made with 5 phases to depict the healthcare framework development from 1925 to 2019 and past in the KSA. To respond to the second examination question, we assessed the present status of Saudi health frameworks concerning the accompanying populace health measurements: future and baby and maternal mortality. Concerning the third exploration question, we assessed the advancement of the Saudi healthcare framework as per the WHO 6 Building Blocks: administration conveyance, health labor force, health data framework, admittance to medicines and advances, health frameworks financing, and initiative and administration<sup>6,7</sup>.

Past investigations of health frameworks in the KSA principally center around an outline of the healthcare framework, health data framework, challenges in the healthcare administrations, and saw medical administrations. Almalki and partners looked into the authentic turn of events and current construction of the healthcare framework in the KSA, considering the significance of the public health area and the open doors and difficulties facing the Saudi healthcare framework. A comparative report directed by Walton et al<sup>8,9</sup>. Featured difficulties in the Saudi healthcare administrations, for example, significant delays for nonemergency medical procedures because of the expanded interest for care combined with development delays as offices battle to grow limit.

Two late examinations center around the health data framework and admittance to mind. Albejaidi inspects the basic necessities of a health data framework in the KSA and reports the absence of a laid out and proficient National Health Information System (NHIS) as a reasonable reason for low quality management in the Saudi health area. The creator infers that there is a dire requirement for development in the healthcare data framework in the KSA to manage the difficulties made by a growing health area. One more review did by Alsumaih and Aldhuwayhi utilizes a web-based study of Saudi understudies living in the USA to assemble view of medical assistance quality for

correlation. Most of Saudi understudies apparent medical administrations in the USA to be of better than those gave in the KSA<sup>10</sup>.

### **Health legislation**

The health regulation in the Kingdom of Saudi Arabia means to give exhaustive health care to all individuals in a fair and available way. The Kingdom, addressed by the Ministry of Health, gives an incorporated organization of health care administrations covering all locales of the Kingdom. The health care in the public authority medical offices is given to residents free of charge and in light of another health care regulation that addresses the issues of the health area.

### **Patient Rights and Responsibilities**

In the conviction of the Government of the Kingdom of Saudi Arabia addressed by the Ministry of Health to enable patients and include them in the choices that help and further develop the administrations gave, The service is resolved to explain the expectations of patients towards the health office in the privileges of patients and their families record, in participation with the capable experts in the field of giving health care administrations thinking about the human, social, and public freedoms and obligations ensured by the framework to people to work fair and square of administration gave and increment the patients trust in health offices and the combination of health and compassionate work divided among specialist organizations and beneficiaries at all levels<sup>10</sup>.

### **Saudi Patient Expenses and Accompanying Regulation**

On the off chance that the patient is alluded for treatment outside the locale of his home inside or outside the Kingdom, the Ministry of Health will bear the costs of patients and their colleagues during the treatment time frame, as per the guideline the costs of Saudi patients and their friends alluded for treatment outside their areas of home.

### **Digital Health**

Digital health is one of the most fundamental change programs worked by the Ministry of Health's, Vision Realization Office. The program intends to work on broad health by giving better health care administrations and raising the worth of health care. The Ministry of Health has attempted to foster a reasonable and compact technique and plan to accomplish these objectives in arrangement with the essential targets of the Kingdom's Vision 2030. The Digital Health procedure gives full usefulness and extended interoperability.

The framework centers around telehealth, online protection, framework accreditation, progressed usefulness including Artificial Intelligence, investigation and models of care. Digital innovation assumes a critical part in supporting the conveyance of the Digital Health Vision and by carrying out this compelling methodology, it makes the right circumstances for the Ministry of Health's digital health biological system to grow. The point of the digital health care framework is to change the conveyance of healthcare through the extension of execution of innovation, to convey more secure and effective healthcare administrations to the general public of the Kingdom of Saudi Arabia<sup>10,11</sup>.

### **Health Facilities**

Gives health care administrations to in excess of 31 million residents and inhabitants, as well as a few million guests during Hajj and Umrah through the health offices that incorporates medical urban communities, specific hospitals, college and military hospitals and primary consideration habitats. On the service's site, there is an intelligent guide shows all of the public authority medical offices areas, and other data required like their functioning hours.

The Kingdom laid out the Saudi Patient Safety Center (SPSC), which fills in as a primary empowering influence of the public procedure of patient security and has added to raising the level of hospitals that accomplished the American Standard for Patient Safety Culture from 30% in 2018 to 60% in 2020.

The Kingdom extended the specific healthcare administration to work on quality and productivity of the healthcare framework while growing inclusion of particular healthcare administrations through a scope of focuses, projects, undertakings and hospitals, which incorporate sending off the Dysplasia National Program by means of Telemedicine, sending off psychiatry divisions at numerous hospitals, sending off Al Amal Hospital in Ha'il with a limit of 200 beds, sending off the North Medical Tower at the Northern Borders Province with a limit of 300 beds, and sending off a few specific administrations at King Salman Hospital in Hai'l<sup>12</sup>.

### **Health Service Boom (2011-2020)**

The healthcare area was one of the significant recipients of public spending during the oil boom in this period. The all out healthcare spending expanded by a normal of 0.5% each year from 5% in 2003 to 9% in 2018. In 2014, the healthcare financial plan arrived at SAR 84.4 billion (USD 22 million). Thus, the quantity of hospitals expanded from 415 out of 2010 to 453 out of 2015, and correspondingly, the quantity of beds expanded from 58,126 to 64,694. On April 25, 2016, the KSA disclosed an aggressive arrangement called Saudi Vision 2030 to change its economy by differentiating the kinds of revenue and diminishing reliance on oil.

Furthermore, the National Transformation Program (NTP) was authorized as a financial activity plan and as a feature of the Vision 2030 improvement plan. The NTP means to work on nature of patient consideration and give incorporated healthcare matching the most elevated worldwide guidelines through a drive created by the MOH. The NTP 2020 is the initial move toward acknowledgment of the Vision 2030. It delineates a financial advancement process that adjusts general approaches, unique targets, and continuous responsibilities to turn into a spearheading model at all levels, including the healthcare system<sup>11,12</sup>.

### **To the Modern Era with Vision 2030 (2021-2030)**

The principle objective of Vision 2030 is to enhance the economy by lessening its dependence on hydrocarbons (petrol and flammable gas) and empowering more private cooperation by empowering both nearby and worldwide interests in a few key enterprises like healthcare.

The privatization of taxpayer driven organizations is relied upon to meet the objectives of Vision 2030 by expanding the private area's commitment to the GDP from 40 to 65% by 2030.

The NTP has distinguished 3 healthcare change goals to be accomplished by 2030:

- (1) Expanding admittance to healthcare services,
- (2) Working on the quality and proficiency of healthcare services, and
- (3) Advancing sickness avoidance through superior admittance to mind and preventive services<sup>13</sup>.

### **Health Clusters**

To work with recipients admittance to the health service as well as working with their exchange between care types, the Ministry of Health is looking to send off health clusters in the Kingdom's areas. The Health Cluster is a coordinated organization of health care suppliers under one managerial construction, serving 1 million individuals and permitting versatility of medical experts inside the health clusters system. A portion of the health clusters that sent off are: Riyadh Health Cluster One and the Second Health Cluster in Central Region.

### **Healthcare during the COVID-19 Pandemic**

The Ministry of Health acknowledgment from the Custodian of the Two Holy Mosques for its endeavors in enacting E-Health during the pandemic because of their capacity to send off a few e-applications to advance the proficiency and nature of health services and raise the fulfillment of recipients, fostering extra services in e-applications, for example, empowering early discovery of illnesses through self-assessment by means of the "Mawid" application, which enrolled 67 million arrangements before the finish of 2020, giving a greater number of than 2.1 million medical counsels

somewhat through the "Seha" application, and improving reaction time for crisis calls from 16 minutes in 2019 to 14.43 minutes in 2020 by means of the Paramedic applications<sup>11-13,14</sup>.

Then, at that point, Ministry of Health got acknowledgment from the Custodian of the Two Holy Mosques for its work in activating E-Health during the pandemic by fostering extra services in electronic applications, for example,:

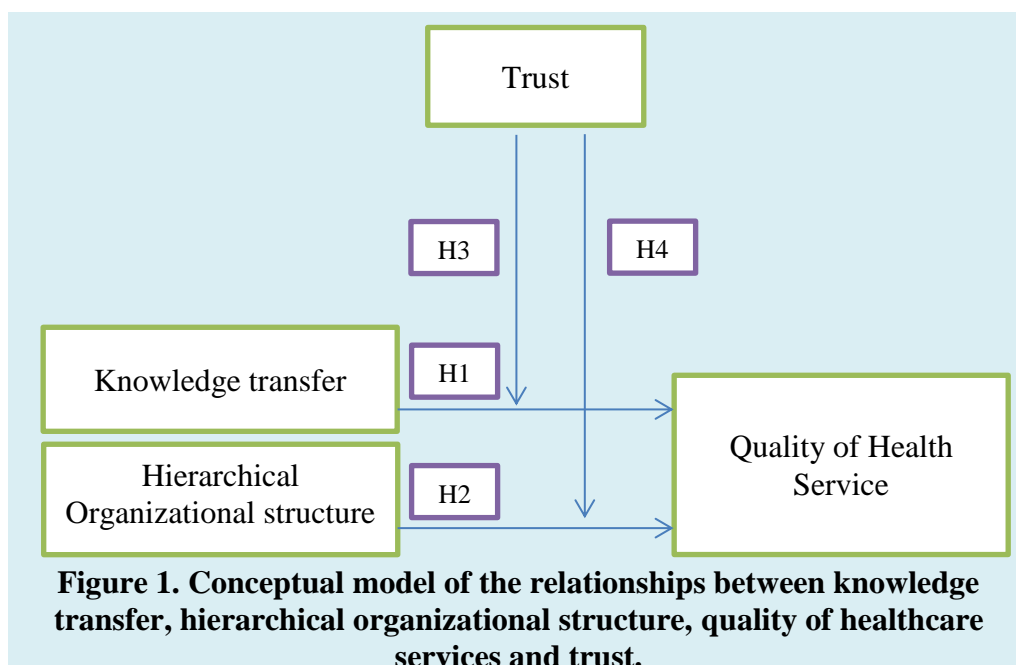
- 1) Empowering early identification of infection through self-assessment by means of "Mawid" application, which enlisted 67 million arrangements before the finish of 2020.
- 2) Giving more than 2.1 million medical consultation somewhat through "Seha" application.
- 3) Improving reaction time for crisis calls from 16 minutes in 2019 to 14.43 minutes in 2020 by means of the "Paramedic application"
- 4) The Kingdom got 100,000 every day calls to 937, reacting to 24.6 million calls and 7.6 million medical conferences before the finish of 2020.

## **Research Methodology**

### **Empirical research**

#### **Sample and data collection procedure**

To acquire primary data from respondents we utilized an adjusted poll. Our exploration was directed on an example of 45 Montenegrin healthcare foundations, of which 32 were publicly possessed and 13 were exclusive. To additional locate our exploration discoveries; we gathered data from the individuals from the Medical Doctor's Union that were from another 16 different healthcare foundations. Altogether, 90 surveys were finished up by respondents.



### **Measures**

To investigate individual builds in our examination, we settled on estimation instruments that fulfill foreordained rules:

- 1) They are normally referred to investigate articles that are distributed in important logical diaries; (they have been utilized in the latest exploration; and
- 2) They are grounded and have been as often as possible utilized and additionally created by key creators of the explored subjects. In the extent of this exploration, we applied the 5-point Likert scale going from 1 (I firmly dissent) to 5 (I totally consent) to evaluate the respondent's understanding with regards to what level of information move, progressive organizational construction, trust, and nature of healthcare services were available in their healthcare organization.

### **Knowledge transfer**

We utilized the eight thing scale ( $\alpha = .93$ ) that adjusted from various assets and used to quantify information move. The poll comprises of explanations, for example, "In my organization key specialists are promptly distinguished and reached."

### **Quality of healthcare services**

We used the five-thing scale ( $\alpha = .85$ ) that adjusted from different assets to quantify the nature of healthcare. Things remembered for the poll are, for instance: "In my organization, we are conveying a better service to our clients.

### **Control variables**

We included two control variables: age and most elevated level of instruction. Incorporation or prohibition of control variables can have huge outcomes on research ends Bernerth and Aguinis<sup>15</sup>, Segment qualities, including age and most elevated level of training might affect the general degrees of information management-related exercises Srivastava<sup>16</sup>. Both control variables were used in comparable past exploration Abbas<sup>17</sup>. Our poll comprises of 21 things and six develops (see Table 1).

To investigate our primary data and to investigate the proposed collaboration impacts we played out a progression of various leveled straight relapses in SPSS 25.0. To check whether our applied model enough accommodates our data, we led a corroborative element investigation (hereinafter: CFA), utilizing the lavaan form 0.6-5 Rosseel<sup>18</sup> of the programming climate R-variant 3.6.2 R Core Team<sup>19</sup>. We investigated the joined legitimacy of all things by investigating normalized factor loadings. The objective was to decide whether our things were genuinely critical or more the suggested .50 limit Hair<sup>20</sup>. The consequences of our CFA investigation showed that all the normalized factor loadings for three out of four builds were measurably critical or more the .50 edge. Two things that were at first expected to gauge various leveled organizational design didn't satisfy the previously mentioned models. The normalized factor loadings for information move were inside the reach from .71 to .91, for progressive organizational design from .61 to .97, for trust from .71 to .86 and for nature of healthcare service from .52 to .92. In our last model, 19 things were utilized.

**Table 1. Montenegro healthcare questionnaire (adapted from [21]).**

<b>Construct</b>	<b>Number of Item</b>	<b>Cronbach alpha (a)</b>
Knowledge transfer	8	.90
Hierarchical Organizational structure	3	.78
Trust	3	.81
Quality of Health Service	5	.88
CV1-Age	1	-
CV2- Highest level of education	1	-
Legend: CV = Control variables		

### **Results**

Results from Table 2 propose that respondents on normal assess information move (3.89) the best, which is trailed by nature of healthcare services (3.80). Various leveled organizational design (2.21) and trust (2.04) on normal got an essentially lower assessment. Relationship coefficients between our deliberate variables are modestly negative, with ranges somewhere in the range of  $-.40$  and  $-.59$  and pitifully or firmly sure, with ranges somewhere in the range of  $.17$  and  $.65$ . There was a critical and positive connection between's the nature of healthcare services and information move ( $.65$ ;  $p < 0.01$ ). The nature of healthcare services had a critical and negative relationship with progressive organizational construction ( $-.51$ ;  $p < 0.01$ ) and trust ( $-.43$ ;  $p < 0.01$ ). Entrust showed a critical positive connection with the control variable old enough ( $.17$ ;  $p < 0.05$ ) and with various leveled

organizational construction (.62;  $p < 0.01$ ). Furthermore, entrust had a huge and negative connection with information move ( $-.40$ ;  $p < 0.01$ ). There was additionally a critical and negative connection between's progressive organizational construction and information move ( $-.59$ ;  $p < 0.01$ ).

**Table 2. Mean Values, Standard Deviations, and Coefficient Correlations (n = 90)**

Variable	Mean	SD	1	2	3	4	5	6
Age	47.80	10.60	-					
Highest level of education	4.65	0.61	-0.61					
Knowledge transfer	3.75	0.90	0.01	0.01	(.91)			
Hierarchical Organizational structure	2.31	0.93	0.05	-0.11	-0.57	(.80)		
Trust	2.10	0.81	0.15	-0.07	-0.41	0.60	(.83)	
Quality of Health care	3.60	0.78	-0.01	-0.12	0.62	-0.49	-0.40	(.83)

## Conclusion

The circumstance in the Kingdom of Saudi Arabia is less notable, yet is particularly interesting, with captivating changes occurring that will profoundly change the manner in which healthcare is given. The nation has offered far reaching, all inclusive access for a long time, and presently Kelly has changed out of a more established design to a crisp converging of doctors, colleagues, and patients into positions on the directorate, and departmental gatherings on persistent wellbeing and quality. The health care in the public authority medical offices is given to residents for nothing and in light of another health care regulation that addresses the issues of the health area.

## Conflicts of interest

The authors declare no conflicts of interest.

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