

Role Of Health Sector to Increase Public Awareness Through Educating the Community and Social Media Platforms: Case of Riyadh Saudi Arabia

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ABSTRACT

Contemporary study aims to investigate the role of the health sector in educating the community and studying public awareness in Saudi Arabia. The country has a growing need for health education and awareness programs to address and prevalent health issues such as non-communicable diseases (NCDs), diabetes, hypertension, and obesity, among others. The paper will explore the current state of health education and awareness programs, their effectiveness, and potential for improvement. The research will also examine the perceptions of healthcare providers and the general public regarding the role of the health sector in promoting health education and awareness in the community. The study will use a convenience sampling technique to select a sample population of individuals residing in Saudi Arabia, who are 18 years of age or older, and have a basic understanding of health issues. The collected data analyzed using descriptive statistics, including frequency distribution, percentage analysis, mean, standard deviation, and correlation analysis. The findings of the study showed that there is a need to improve health education and awareness programs in Saudi Arabia to address these issues and promote healthier lifestyles among the population. The findings of this research can guide the development of effective and sustainable health education and awareness initiatives that address the prevalent health issues in Saudi Arabia.

Keywords: *Saudi Arabia, health education, awareness programs, non-communicable diseases, public awareness, healthcare providers*

INTRODUCTION

Demographically, Saudi Arabia is the heart of the Arab and Islamic world, the investment powerhouse, and the hub connecting three continents. Life in the Kingdom of Saudi Arabia is characterized by social diversity, which represents a cultural richness by sharing a rich identity for the Kingdom's population, which has reached more than 34 million people. The Kingdom of Saudi Arabia is divided into thirteen administrative regions, united by the Arabic

language, and unique from it, and its own customs, customs and traditions, and its own kitchen, which contains dishes inspired by its environment and nature. According to the Regions System issued by Royal Decree, the Kingdom was divided into (13) administrative regions. Riyadh region, it is the capital of the Kingdom, additionally it is one of the largest health regions in the Kingdom in terms of geographical area, population density, and density in various specialized health services,

whether at the curative or preventive level. The health services in the Riyadh region in general and the city of Riyadh through the General Directorate of Health Affairs in Riyadh represented by its various departments, is considered one of the strongest cities in supporting and enhancing the role of health education. There are many governmental and private health institutions in Riyadh. In 2017, there were (17) public sector hospitals and 37 private hospitals, in addition to 125 public primary care centers (PHC) and 818 private clinics (Sixteenth Service Guide 2016). The health services in the city of Riyadh preceded other regions in terms of development and the number of health facilities. Many hospitals and clinics were established in the Riyadh region, and primary health care centers spread there to provide integrated basic services to the residents of the region. In addition to a number of hospitals affiliated with the concerned military authorities, the most prominent of which are King Fahd Hospital in the National Guard and the Armed Forces Hospital (HSRC, 2016).

Riyadh Municipality announced the launch of a health education program that targets workers in food and public health facilities in the capital, within the framework of its interest in granting workers advanced qualification that contributes to improving the quality of services provided to the city's residents and visitors. Program provides information, scientific facts, and correct behavioral experiences through mandatory qualifying courses that include all those wishing to work in food and public health facilities, in a move that would contribute to changing wrong behaviors and promoting sound health practices (SPA, 2021).

Contemporary situation in Saudi Arabia shows a growing need for health education and awareness programs to address the prevalent health issues in the country. According to the Saudi Health Interview Survey conducted in 2013, non-communicable diseases, such as diabetes, hypertension, and obesity, are highly prevalent in Saudi Arabia (Memish et al., 2014).

Significance of this research lies in its potential to inform policy makers, healthcare providers, and educators on how to improve health education and awareness programs in Saudi Arabia. By identifying the strengths and

weaknesses of existing programs, this research can guide the development of effective and sustainable health education and awareness initiatives that address the prevalent health issues in the country. Aim of this research paper is to investigate the role of the health sector in educating the community and studying public awareness in Saudi Arabia. The paper will examine the current state of health education and awareness programs in Saudi Arabia, their effectiveness in addressing prevalent health issues, and their potential for improvement. The paper will also explore the perceptions of healthcare providers and the general public regarding the role of the health sector in promoting health education and awareness in the community.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Globally the health sector plays a crucial role in educating the community and studying public awareness. Education is an essential component of health promotion and disease prevention efforts. It basically aims to empower individuals and communities to make informed decisions about their health, reduce risky behaviors, and improve their overall well-being. Public awareness, on the other hand, refers to the level of knowledge, understanding, and perception of health issues and risks within a population.

According to the World Health Organization (WHO), health education is "any combination of learning experiences designed to facilitate voluntary actions conducive to health" (WHO, 2019). This definition highlights the importance of providing individuals with the knowledge and skills necessary to make healthy choices. Health education encompasses a range of activities, including health promotion campaigns, community outreach programs, and school-based interventions. Further the goal is to increase awareness and understanding of health issues and promote healthy lifestyle and behaviors.

Hypotheses Development

Health Sector And Community Education

Among what is measured by the progress of nations and peoples is the high level of health awareness among their members, health awareness is one of the main indicators that

researchers and scholars rely on in classifying developed and backward societies, and that the concept of health education and awareness means educating individuals and raising their awareness for the purpose of changing their behavior and habits, especially in the state of the spread of diseases within the community, as well as the inculcation of social customs and traditions that would support the health aspect and its development, such as practicing sports activity, healthy nutrition, and sound healthy habits.

Saudi Arabia, like many other countries, faces numerous health challenges. In recent years, there has been a growing concern about the effectiveness of the health sector and community education in order to address prevalent health issues in the country.

Previous studies have explored the relationship between health education, awareness, and the prevalence of health issues. For example, a study by Al-Khalidi et al. (2016) examined the effectiveness of a health education program on the prevention of diabetes in Saudi Arabia. The study found that the program led to significant improvements in knowledge, attitudes, and practices related to diabetes prevention. However, the study also highlighted the need for sustained efforts to maintain the effectiveness of such programs. Another study conducted by (Almalki et al., 2014), investigated the level of awareness and knowledge of cervical cancer among Saudi women. The study found that there was a lack of health education and knowledge among the women surveyed, with only 21% of participants reporting having heard of cervical cancer. The study highlights the need for increased efforts to raise health sector efforts towards educating the community of this disease and the importance of regular screening.

Conceptually, health sector efforts and educating society programs are essential components of community health. These programs aim to empower individuals and communities with the knowledge and skills necessary to make informed decisions about their health. They can help prevent diseases, reduce risky behaviors, and promote healthy lifestyles. However, the effectiveness of these programs depends on various factors, including the quality of the program, the level of community engagement, and the availability of resources.

In conclusion, the hypothesis that health sector and community education programs in Saudi Arabia are not sufficient in addressing prevalent health issues is supported by previous studies and concepts related to public health. Efforts to improve these programs are crucial in addressing the health challenges facing the Saudi population. Further research is necessary to identify specific gaps in current programs and design targeted interventions to address them. Thus, based on the following discussions the following study then suggests the following hypothesis.

H1: Health sector has a positive relationship with community education.

Health Sector And Social Media Platform

Indeed, it is only recently that scholars have begun to explicitly link the concepts of e-Government, public health and social media; for example, Andersen, Medaglia, and Henriksen (2012) drew on e-Government theories in an exploratory study of the value impacts of social media for the Danish public health system and barriers to achieving these. Given the priority many governments are placing on digital services and the investments being made in social media engagement in the health sector, policymakers and managers stand to benefit from a timely synthesis of relevant evidence, to guide future practice. Such a synthesis would also add value to the academic e-Government literature, in which healthcare is relatively underrepresented, compared with other public sectors.

Present study however with the following hypothesis aimed to address this deficit by using the rigorous “systematic review” technique to identify, classify, critically appraise and synthesize the corpus of published research evidence relevant to the adoption, use and impacts of health sector impact on social media. In doing so present study recognized that relevant articles may not explicitly use all of these terms but it may nevertheless be possible discern an implicit the agenda from studies on the use of social media for delivering public health services (e.g. Thackeray, Neiger, Smith, & Van Wagenen, 2012). Past literature has witnessed the association between the health sector and social media platforms in order to educate the community through these channels. This required further investigation (Medaglia & Henriksen,

2012), and study thus considered the following hypothesis.

H2: Health sector has a positive relationship with social media platforms.

Community Education And Public Awareness

Health awareness is educating people and working to increase their information and health culture in order to teach them how to deal with infectious epidemic diseases, and avoid infection with others, by spreading correct behaviors and avoiding wrong methods that negatively affect health in general, and holding the media responsible for spreading awareness through work seminars and the publication of many health magazines and useful books to raise people's health awareness (WHO, 2019). Such as teaching young people the importance of early examination and making them aware that it was a major cause in the treatment of many serious diseases, and young people must also be encouraged to change their incorrect behaviors with other correct and useful behaviors that preserve their health, young people must also be encouraged to spread awareness among them by giving up bad habits such as smoking Stay up late, and raise awareness of the importance of adhering to a healthy diet, strengthening the body's immunity, and exercising (Alamri and Abdulrhman (2019). Thus based on discussion above the following study considered and developed the following hypothesis below.

H3: community education has a positive relationship with public awareness.

Social Media Platform And Public Awareness

Social media provides an outlet to increase and promote translational health communication strategies and effective data dissemination, in ways that allow users to not only utilize but also

create and share pertinent health information (Al-Khasawneh et al., 2019). Moreover, the use of social media for advocacy and communications in health promotion offers exciting new prospects for broader reach, greater efficiency, and lowered costs of communication and advocacy campaigns. As with other technological innovations in healthcare, these efficiencies may be viewed by those providing funding as an opportunity to decrease budgets and increase the scope of health promotion activity delivered by health education specialists and their organizations. This may well result in a reduction in the use of more established communication channels (e.g., TV, radio, and print-based media) traditionally used for health promotion (WHO, 2019).

Although the application of social media in public health and health promotion has yielded some success in terms of generating support structures and networks for effective health behavior change, there are challenges and complications associated with social media use that also need to be addressed e.g. managing misinformation, ensuring compliance with user privacy protections (Qahtani et al., 2018). While it is relatively straightforward to view social media use as a universal communication channel, especially for those who already use social media, the risk of using social media lies in reducing health information access among those who are not technologically ‘connected’. Social media is not likely to be an effective option for population subgroups including the elderly; the physically and cognitively disabled; and those with low text, technical, and eHealth literacy (Micheal & Samantha, 2020). Thus in order to more elaborate the following study then suggest the below hypothesis.

H4: Social media platforms have a positive relationship with public awareness.

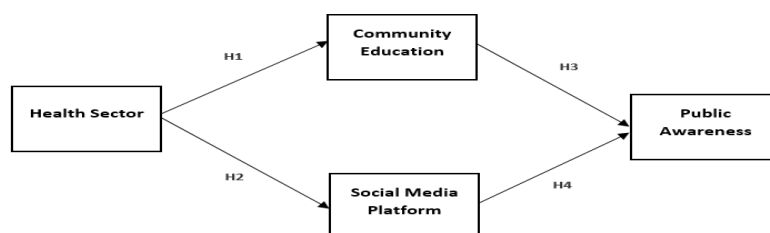


Figure-1: Theoretical Framework

RESEARCH METHODOLOGY

This chapter will provide a detailed description of the research methodology adopted for the study entitled "The Role of the Health Sector in Educating the Community and Studying Public Awareness" and the hypotheses formulated for the research. This study aims to investigate the role of health education and awareness programs in addressing prevalent health issues in Saudi Arabia, the perception of healthcare providers regarding the role of the health sector in promoting health education and awareness, the correlation between the level of education and knowledge of individuals regarding health issues, the role of social media platforms in promoting health education and awareness, and the impact of government policies and initiatives on community health outcomes.

Sampling And Respondents

The targeted respondents for this research study will be individuals residing in Riyadh Saudi Arabia, who are 18 years of age and above, and have a basic understanding of health issues. The study created a unique link in google docs and spread among the social network sites and requested individuals to participate in the survey questionnaire. Questionnaire items were adapted and adopted from the previous studies of (Alflayeh & Haseebullah, 2020; Al-Mousa et al., 2022; Bartl et al., 2013; Finn, 2005, 2012).

Questionnaire divided into different sections that address each of the hypothesis. Items of the questionnaire were ranged using a 5-point Likert scale to "strongly disagree =1 and strongly agree

= 5" to measure the level of agreement of the respondents with the statements. Some demographic characteristics were also added in the questionnaire survey.

DATA ANALYSIS

Measurements

Ten different health centers were chosen to target the respondents. Mainly the respondents were the staff of health centers. Respondents were asked to participate in the study and briefed in prior before participating in the survey.

Total valid responses were counted as 291. In order to justify the sample size, the study then utilized the recommendations of (Hair et al., 2010), where mentioned that sample size should be (5) times higher than the considered items. Study had a total of 25 items and multiplying 5 times will calculate 125. Thus, minimum respondents should not be less than 125 respondents.

Descriptive Analysis

Analysis of descriptive consists the respondent's demographics, such as age, gender, group, nationality, education level, marital status, monthly income and occupation. Total valid responses were calculated as 291, male respondents were counted as 196 and 95 were counted as female respondents. Among the whole 176 participants were recorded as local citizens and 115 were calculated as non-nationals. Table below however shows all the demographic characteristics of respondents.

TABLE 1: Respondents Demographics

Demography	Options	Frequency = 291	%age
Sex(Gender)	Male	196.00	67.40
	Female	95.00	32.60
Nationality(Race)	Saudi Nationals	176.00	60.50
	Other Nationalities	115.00	39.50
Age	Up to 20 Years	10.00	03.40
	21-30	47.00	16.20
	31-40	118.00	40.50
	41-50	94.00	32.30
	50 & above	22.00	07.60
Marital Status	Married	243.00	83.50
	Non-Married	48.00	16.50

Education	Diploma/Certificate/etc.	23.00	07.90
	Undergraduate	64.00	22.00
	Graduate	159.00	54.60
	PhD	45.00	15.50
Occupation	Employee(full-time)	161.00	55.30
	Student	36.00	12.40
	Own Business	42.00	14.40
	Re-tired	15.00	05.20
	Unemployed	37.00	12.70

Validity And Reliability

Composite reliability(CR) and Cronbach alpha test are supposed to conduct due to its popularity among the social sciences researches. Thus, present study considered the Cronbach alpha test to check the reliability and validity among the considered construct items (Cronbach, 1951).

Minimum and required criteria for Cronbach alpha test is supposed to be greater than (0.70) (Vinzi et al., 2010). The application called SPSS was then utilized to conduct the reliability test. Results can be seen in table 2 below which shows all the values of Cronbach alpha, with the values fulfilling the required and minimum criteria.

TABLE 2: Cronbach's Alpha Values Results

Constructs	Cronbach Alpha Values
Health Sector (HS)	0.832
Community Education (CE)	0.854
Social Media Platform (SMP)	0.891
Public Awareness (PA)	0.799

Standard Deviation And Mean Value

Standard deviation(SD) is called the amount of variability and average dataset. This test is basically conducted to know that how far the values are from the mean level (Pritha Bhandari, 2023). Table below shows the calculated values of standard deviation, mean, and mean level. Mean value (HS) calculated as 4.191, standard deviation calculated as 0.743, and thus considered as middle to the mean. Similarly, (CE) the mean value counted as 4.371, where

standard deviation(Sd.) found as 0.768 and considered as middle to the level of mean. Also, for (SMP), value of mean is calculated as 4.352, and value for standard deviation(Sd.) recorded as 0.771, also included in the domain of middle to the level of mean. The (PA) mean value calculated as 4.177, and standard deviation(Sd.) as 0.701, which also included in the middle to the level of mean. All the values of mean, standard deviation and mean level can be seen in table below.

TABLE 3: Means & Standard Deviation

Constructs	Mean	Standard Deviation	Mean Level
Health Sector (HS)	4.191	0.743	Middle
Community Education (CE)	4.371	0.768	Middle
Social Media Platform (SMP)	4.352	0.771	Middle
Public Awareness (PA)	4.177	0.701	Middle

Hypotheses And Correlation Test

In order to test the link and correlation among the constructs, the study then conducted the Pearson correlation test, that is significant at two tailed. Results can be seen in the table below. All the considered constructs which includes health

sector, community education, social media platform and public awareness were tested using SPSS application for correlation. Rule of thumb suggested that values 0.01 are considered as significant at two tailed.

TABLE 4: Hypotheses Correlation Test

	--	Health Sector	Community Education	Social Media Platform	Public Awareness
Health Sector	Pearson Correlation	.508**	.223**	.324**	.561**
	Sig. (2-tailed)		.000	.000	.000
		N=291	291	291	291
Community Education	Pearson Correlation	.462**	.521**	.301**	.367**
	Sig. (2-tailed)	.000		.000	.000
		N=291	291	291	291
Social Media Platform	Pearson Correlation	.362**	.398**	.572**	.476**
	Sig. (2-tailed)	.000	.000		.000
		N=291	291	291	291
Public Awareness	Pearson Correlation	.345**	.512**	.568**	.472**
	Sig. (2-tailed)	.000	.000	.000	
		N=291	291	291	291

***Correlations are significant at 0.01 level (2-tailed)

Hypotheses Results

Table below reflects all the hypotheses and results. Where the H₁ links (HS) and (CE) are significant at (0.000) and calculated the t-value with 8.623, thus the link found positive. Similarly, link between (HS) and (SMP) were tested and found it significant at (0.000), whereas, the t-value 7.764, these values recorded

as positive link. Link between (CE) and (PA) were also found significant at (0.000), and the t-value recorded as 8.835, based on the mentioned values thus, this link has been found positive. Link between (SMP) and (PA) is also found significant at (0.000), and value for (t) recorded as 8.213, thus this link of these constructs also found positive.

TABLE 5: Hypotheses Results

	Constructs	t-value	Significant	Result
H ₁	Health Sector(HS) → Community Education(CE)	8.623	0.000	Positive
H ₂	Health Sector(HS) → Social Media Platform(SMP)	7.764	0.000	Positive
H ₃	Community Education(CE) → Public Awareness(PA)	8.835	0.000	Positive
H ₄	Social Media Platform(SMP) → Public Awareness(PA)	8.213	0.000	Positive

DISCUSSION

The descriptive analysis of the survey data is presented in this section. The respondents' demographics, such as age, gender, nationality, education level, marital status, monthly income, and occupation are analyzed. The survey received a total of 291 valid responses, out of which 196 were male and 95 were female. Among the participants, 176 were local citizens, and 115 were non-nationals.

Table 1 provides a breakdown of the respondents' demographics. The majority of the respondents were male (67.40%), and more than half of the

respondents were Saudi nationals (60.50%). Regarding age, the highest number of respondents fell in the age range of 31-40 (40.50%), followed by 41-50 (32.30%). The majority of the respondents were married (83.50%), and the highest level of education achieved was a graduate degree (54.60%). The majority of the respondents were employees (55.30%), followed by those who were self-employed (14.40%).

To test the reliability and validity of the survey questions, Cronbach's alpha test was conducted. The minimum and required criteria for the test

were set at 0.70, and the results are presented in Table 2. All constructs, including Health Sector (HS), Community Education (CE), Social Media Platform (SMP), and Public Awareness (PA), fulfilled the required criteria.

Standard deviation and mean value were also calculated to measure the variability and the average dataset of the constructs. The mean values for HS, CE, SMP, and PA were 4.191, 4.371, 4.352, and 4.177, respectively. All constructs were considered in the middle to the level of mean. The standard deviation values were 0.743, 0.768, 0.771, and 0.701, respectively, and all were considered in the domain of middle to the level of mean. Table 3 presents the mean, standard deviation, and mean level of each construct.

To examine the relationship and correlation among the constructs, the Pearson correlation test was conducted, and the results are presented in Table 4. All constructs showed a significant correlation with each other, and the values of the correlation coefficients ranged from 0.223 to 0.572. The rule of thumb suggested that values of 0.01 or lower are considered significant at two-tailed.

The survey results provided valuable information regarding the respondents' demographics, construct reliability and validity, mean and standard deviation, and construct correlation. These findings can aid in understanding the impact of health awareness campaigns on public health and identifying potential areas for improvement.

The findings of the study showed that there is a need to improve health education and awareness programs in Saudi Arabia to address these issues and promote healthier lifestyles among the population. These findings contribute to the literature by providing valuable information on the demographics of the respondents and the reliability and validity of the survey questions. They also demonstrate the interrelatedness of the constructs, which can aid in understanding the impact of health awareness campaigns on public health and identifying potential areas for improvement.

In conclusion, One potential area for future research could be to investigate the effectiveness of different health awareness campaigns on public health outcomes. Additionally, exploring

the potential impact of demographic factors on the effectiveness of these campaigns could also be an interesting avenue for future research.

Study Limitation And Future Directions

Although the study provides valuable information on the role of the health sector in promoting health education and awareness in Saudi Arabia, it has some limitations.

First, the study used a convenience sampling technique, which may not be representative of the entire population. This may limit the generalizability of the findings to other regions or groups of individuals in Saudi Arabia.

Second, the study relied on self-reported data, which may be subject to social desirability bias. Participants may have provided answers they thought were more socially acceptable rather than their true opinions or experiences.

Third, the study only focused on individuals who have a basic understanding of health issues, which may limit the understanding of the overall population's perception of health education and awareness programs in Saudi Arabia.

Lastly, the study did not explore the potential barriers to implementing effective health education and awareness programs in Saudi Arabia, such as cultural or social factors that may affect individuals' willingness to participate or engage in such programs.

CONCLUSION

In conclusion, the research highlights the need for health education and awareness programs to address the prevalent health issues in Saudi Arabia. The study aimed to investigate the role of the health sector in educating the community and studying public awareness. The research methodology involved conducting a survey among individuals in Saudi Arabia to collect data on their perceptions of health education and awareness programs. The findings demonstrate that there is a need to improve health education and awareness programs to promote healthier lifestyles among the population. The study also provides valuable information on the demographics of the respondents, the reliability and validity of the survey questions, and the interrelatedness of the constructs. This research can guide the development of effective and

sustainable health education and awareness initiatives that address the prevalent health issues in the country. Further research can explore the effectiveness of different health awareness campaigns on public health outcomes and the potential impact of government policies and initiatives on community health outcomes.

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