An integrative framework of health care administration and its impact on patient behavior: an empirical investigation of private clinics in Riyadh, Saudi Arabia

Un marco integrativo de la administración de la atención médica y su impacto en el comportamiento del paciente: una investigación empírica de clínicas privadas en Riad, Arabia Saudita

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ABSTRACT

Present study core aim was to investigate the impact of health care administration ultimately on patient behavior. Study was conducted in Riyadh Saudi Arabia. Study was conducted in Riyadh private health clinics. Total 4 (Four) constructs were considered and four hypotheses were developed. Based on the study framework, the research questions were developed and answered through the study findings. Total of 320 surveys questionnaire were distributed among the visitors or the attendants with the patients. However, valid responses were counted as 281. Data set then prepared while using SPSS version 23. All the necessary tests were conducted, such as Cronbach alpha, standard deviation, mean value calculation, hypotheses testing etc. Links between the hypotheses shows the positive association with the assumed relationship.

Keywords: Administration, hypotheses, financial incentives, Integrative Framework.

RESUMEN

El objetivo central del presente estudio fue investigar el impacto de la administración de la atención médica en última instancia, en el comportamiento del paciente. El estudio se realizó en Riad, Arabia Saudita. El estudio se realizó en clínicas de salud privadas de Riyadh. Se consideraron un total de 4 (Cuatro) constructos y se desarrollaron cuatro hipótesis. Con base en el marco del estudio, las preguntas de investigación se desarrollaron y respondieron a través de los hallazgos del estudio. Se distribuyeron un total de 320 cuestionarios de encuestas entre los visitantes o los asistentes con los pacientes. Sin embargo, las respuestas válidas se contaron como 281. El conjunto de datos se preparó con SPSS versión 23. Se realizaron todas las pruebas necesarias, como alfa de Cronbach, desviación estándar, cálculo del valor medio, prueba de hipótesis, etc. Los vínculos entre las hipótesis muestran la asociación positiva con la supuesta relación.

Palabras claves: Administración, hipótesis, incentivos financieros, Marco Integrador.
1-INTRODUCTION

Health care administration in Saudi Arabian private clinics has undergone significant changes in recent years, with a focus on improving patient care and outcomes, increasing efficiency, and ensuring compliance with regulatory requirements. In this essay, we will explore the current state of health care administration in Saudi Arabian private clinics, with APA referencing.

In recent years, the Saudi Arabian government has implemented numerous reforms to improve the quality of health care services in the country, including in the private sector. These reforms have focused on promoting patient-centered care, enhancing the quality of medical services, and increasing the efficiency of healthcare delivery (Almutairi et al., 2021).

One of the key areas of focus in health care administration in Saudi Arabian private clinics has been the adoption of electronic medical records (EMRs). EMRs have been shown to improve patient care outcomes, reduce medical errors, and increase the efficiency of healthcare delivery (Alqahtani et al., 2020). To encourage the adoption of EMRs, the Saudi Arabian government has provided financial incentives to private clinics that implement these systems.

Another important aspect of health care administration in Saudi Arabian private clinics is compliance with regulatory requirements. Private clinics must adhere to a range of regulations related to patient safety, medical ethics, and the provision of quality care. These regulations are enforced by the Saudi Arabian Ministry of Health and other regulatory bodies (Almutairi et al., 2021).

In addition to these efforts, private clinics in Saudi Arabia are increasingly focusing on patient satisfaction and experience. This includes implementing patient feedback systems, providing a comfortable and welcoming environment, and ensuring timely access to care. These efforts are aimed at improving patient outcomes and increasing patient loyalty and retention.

To ensure the success of these initiatives, health care administrators in Saudi Arabian private clinics must have a strong understanding of healthcare management principles and practices. This includes strategic planning, financial management, and leadership skills. In addition, health care administrators must be able to effectively manage and motivate their staff to provide high-quality care and deliver excellent customer service.

In conclusion, health care administration in Saudi Arabian private clinics has undergone significant changes in recent years, with a focus on improving patient care and outcomes, increasing efficiency, and ensuring compliance with regulatory requirements. The adoption of EMRs, compliance with regulations, and a focus on patient satisfaction and experience are all key components of this effort.

1.2 Patient re-patronage in private clinics

Patient re-patronage, or the likelihood of patients to return to a healthcare provider for future care, is an important factor in the success of private clinics in Saudi Arabia. One of the key factors that influence patient re-patronage in private clinics in Saudi Arabia is the quality of care provided. Patients are more likely to return to a healthcare provider if they receive high-quality care that meets their needs and expectations (Abdel-Razek et al., 2019). This includes not only medical care but also the overall patient experience, including communication with staff, wait times, and the physical environment of the clinic.

Another important factor in patient re-patronage is the availability of services. Patients are more likely to return to a healthcare provider if they can access a wide range of services in one location, including medical specialties, diagnostic tests, and other ancillary services (Abdel-Razek et al., 2019).
In addition to these factors, patient re-patronage in private clinics in Saudi Arabia is also influenced by the cost of care. Patients are more likely to return to a healthcare provider if they perceive the cost of care to be reasonable and affordable. This is particularly important in the private healthcare sector, where patients are responsible for a greater share of healthcare costs (Khan et al., 2018).

Another important factor in patient re-patronage is trust in the healthcare provider. Patients are more likely to return to a healthcare provider if they trust the provider's clinical expertise, communication skills, and overall professionalism (Abdel-Razek et al., 2019).

To ensure high levels of patient re-patronage, private clinics in Saudi Arabia must focus on providing high-quality care, offering a wide range of services, ensuring affordability, and building trust with patients. This requires not only clinical expertise but also strong healthcare management and marketing skills.

Eventually, patient re-patronage is a critical factor in the success of private clinics in Saudi Arabia. Quality of care, availability of services, cost of care, and trust in the healthcare provider are all important factors that influence patient re-patronage. To succeed in this competitive market, private clinics must focus on providing high-quality, comprehensive care and building strong relationships with patients.

2- LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

2.1- Health care administration and quality of health care

Health care administration plays a significant role in ensuring the quality of health care. According to the Institute of Medicine, health care quality is defined as "the degree to which health care services provided to individuals and patient populations improve desired health outcomes" (Institute of Medicine, 2001). Effective health care administration helps to ensure that patients receive high-quality care that is safe, effective, patient-centered, timely, efficient, and equitable. In this essay, we will explore the impact of health care administration on the quality of health care. One of the key roles of health care administration is to establish and maintain quality assurance programs. These programs aim to identify and correct errors and deficiencies in health care delivery processes, as well as monitor and measure patient outcomes to ensure that the desired health outcomes are achieved (Shewchuk, 2012). By establishing effective quality assurance programs, health care administrators can help to ensure that health care providers are providing high-quality care that meets industry standards and best practices.

Another important role of health care administration is to ensure that health care providers have the necessary resources and support to provide high-quality care. This includes ensuring that health care providers have access to the latest medical technologies, medications, and treatment protocols, as well as providing ongoing training and education to help them stay up-to-date on best practices and new developments in their field (Mosley, 2018). By providing health care providers with the necessary resources and support, health care administrators can help to ensure that patients receive the best possible care.

Effective health care administration also plays a critical role in patient safety. Health care administrators are responsible for implementing policies and procedures that help to minimize the risk of medical errors, adverse events, and other patient safety issues (Shewchuk, 2012). This includes establishing effective communication channels between health care providers, implementing robust patient safety reporting systems, and providing ongoing training and education to health care providers on patient safety best practices (Mosley, 2018). By prioritizing patient safety, health care administrators can help to ensure that patients receive safe, effective, and high-quality care.
In conclusion, health care administration plays a critical role in ensuring the quality of health care. By establishing quality assurance programs, providing health care providers with necessary resources and support, and prioritizing patient safety, health care administrators can help to ensure that patients receive high-quality care that is safe, effective, patient-centered, timely, efficient, and equitable. Thus, based on the following discussion the present study developed and assumed the following hypothesis. $H_1$: Health care administration has positive impact on quality of health care.

2.2 Quality of health care and overall health facility

The quality of healthcare and overall health facility can have a significant impact on patient outcomes and experiences. The Institute of Medicine defines healthcare quality as "the degree to which health care services provided to individuals and patient populations improve desired health outcomes" (Institute of Medicine, 2001). Research has shown that the quality of healthcare and overall health facility can impact patient outcomes. For example, a study conducted by the Agency for Healthcare Research and Quality found that patients who received care from high-performing healthcare facilities were more likely to experience positive outcomes, such as improved health status and reduced hospital readmissions (Agency for Healthcare Research and Quality, 2018). Additionally, healthcare facilities that prioritize patient safety and quality of care have been shown to have lower rates of adverse events, such as healthcare-associated infections (Agency for Healthcare Research and Quality, 2021).

The overall health facility, including the physical environment, can also impact patient experiences. For example, a study conducted by the Center for Health Design found that the physical environment of healthcare facilities can impact patient satisfaction and healing, as well as staff satisfaction and retention (Center for Health Design, 2021). Factors such as noise level, privacy, and access to natural light have been shown to impact patient experiences and outcomes.

To improve the quality of healthcare and overall health facility, healthcare organizations can implement quality improvement initiatives. These initiatives can include implementing evidence-based clinical guidelines, improving patient safety protocols, and enhancing the physical environment of healthcare facilities (Agency for Healthcare Research and Quality, 2021). Additionally, healthcare organizations can utilize patient satisfaction surveys and feedback to identify areas for improvement and implement changes to enhance the patient experience.

In conclusion, the quality of healthcare and overall health facility can have a significant impact on patient outcomes and experiences. Healthcare organizations can improve the quality of healthcare and overall health facility by implementing quality improvement initiatives and utilizing patient feedback to identify areas for improvement. Thus, based on the following discussion the present study developed and assumed the following hypothesis. $H_2$: Quality of health care has positive impact on overall health facility.

2.3 Quality of health care and patient re-patronage behavior

The quality of healthcare can influence patient re-patronage behavior, which refers to the likelihood that patients will return to the same healthcare provider or facility for future care Singh et al., (2019). Patients are more likely to re-patronize healthcare providers and facilities that provide high-quality care and positive experiences. Research has shown that the quality of healthcare can impact patient re-patronage behavior. For example, a study conducted by (Ladhari et al., 2017; Haseeb & Alflayyeh, 2021) found that patients who perceived the quality of healthcare to be high were more likely to re-patronize the same healthcare provider or facility. Similarly, a study by Garman et al. (2016) found that patient satisfaction with the quality of care was positively associated with patient re-patronage behavior.
The factors that contribute to the quality of healthcare and influence patient re-patronage behavior can include clinical quality, patient-centeredness, and communication. Clinical quality refers to the effectiveness and safety of healthcare services provided to patients. Patient-centeredness refers to the extent to which healthcare providers meet patients' needs, preferences, and values. Communication refers to the ability of healthcare providers to convey information effectively to patients, as well as listen to and address patients' concerns and questions (Institute of Medicine, 2001).

To improve the quality of healthcare and patient re-patronage behavior, healthcare providers and facilities can implement strategies to improve clinical quality, patient-centeredness, and communication. Strategies can include implementing evidence-based clinical guidelines, enhancing patient education and communication, improving patient access and convenience, and focusing on continuous quality improvement initiatives (Institute of Medicine, 2001).

In conclusion, the quality of healthcare can impact patient re-patronage behavior. Healthcare providers and facilities that prioritize clinical quality, patient-centeredness, and communication are more likely to retain patients and promote positive patient outcomes.

Thus, based on the following discussion the present study developed and assumed the following hypothesis.

H3: Quality of health care has impact on patient re-patronage behavior.

2.4 Overall health facility and patient re-patronage behavior

The overall health facility, including the physical environment and amenities, can impact patient re-patronage behavior, which refers to the likelihood that patients will return to the same healthcare provider or facility for future care. Patients are more likely to re-patronize healthcare facilities that provide a positive experience, including a comfortable and welcoming physical environment, amenities, and access to convenient and timely care.

Research has shown that the overall health facility can impact patient re-patronage behavior. For example, a study conducted by McFarland et al. (2016) found that patients who perceived the overall quality of the health facility to be high were more likely to re-patronize the same facility. Similarly, a study by Yang and Lu (2018) found that patient satisfaction with the physical environment of healthcare facilities was positively associated with patient re-patronage behavior.

The factors that contribute to the overall health facility and influence patient re-patronage behavior can include the physical environment, amenities, and access to convenient and timely care. The physical environment refers to the design and layout of the facility, including elements such as lighting, noise levels, and cleanliness. Amenities can include features such as comfortable waiting areas, access to refreshments, and convenient parking. Access to convenient and timely care refers to the ease of scheduling appointments, wait times, and the availability of same-day appointments (Institute of Medicine, 2001).

To improve the overall health facility and patient re-patronage behavior, healthcare providers and facilities can implement strategies to enhance the physical environment, amenities, and access to convenient and timely care. Strategies can include improving the design and layout of healthcare facilities, enhancing waiting areas, providing refreshments and entertainment options, and utilizing technology to streamline appointment scheduling and wait times (Institute of Medicine, 2001; Al-Mousa et al., 2022; Al-Meshal et al., 2020).

In conclusion, the overall health facility can impact patient re-patronage behavior. Healthcare providers and facilities that prioritize the physical environment, amenities, and access to convenient and timely care are more likely to retain patients and promote positive patient outcomes. Thus, based on the following
discussion the present study developed and assumed the following hypothesis (figure 1). H4: Overall health facility has impact on patient re-patronage behavior.

![Theoretical Framework](image)

**Figure 1. Theoretical Framework**

### 3- METHOD

The section provided a detailed description of the research methodology adopted for the study entitled "An Integrative Framework of Health Care Administration and its Impact on Patient Behavior: An Empirical Investigation of Private Clinics in Riyadh Saudi Arabia, and thus hypotheses formulated for the research. Present study aim is to investigate the role of health care administration and its impact on quality of health care and on overall health facility which leads consequently patient for re-patronage behavior.

3.1- Sampling and respondents

The targeted respondents for this research study were individuals who are residing in Riyadh, Saudi Arabia, and are visited private clinics for some health issues. Questionnaire items were adapted and adopted from the previous studies of (Al-Mousa et al., 2022).

Questionnaire had divided in different sections that address each of the hypothesis. Items of the questionnaire were ranged using a 5 Point-Likert scale i.e. “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.

### 4- DATA ANALYSIS

4.1 Measurements

Fourteen different health centers were chosen to target the respondents in Riyadh city of Saudi Arabia. Mainly the respondents were the patients or attendant with the patients. Respondents were asked to participate in the study and briefed in prior before participating in the survey. Total valid responses were counted as 281. 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.

4.2 Descriptive analysis

Descriptive analysis refers to the process of summarizing and describing data using various statistical and visual methods. It is typically the first step in data analysis and provides an overview of the data, allowing researchers to identify patterns, trends, and relationships within the data. However, for the present study the
Descriptive analysis includes gender, age, nationality, etc. Valid responses were calculated as 281, male respondents were counted as 186 and 95 were counted as female respondents. Among the whole 166 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).

<table>
<thead>
<tr>
<th>Demography</th>
<th>Options..</th>
<th>Frequency = 281</th>
<th>%age.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (Gender)</td>
<td>Male</td>
<td>186.00</td>
<td>66.19</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>95.00</td>
<td>33.80</td>
</tr>
<tr>
<td>Nationality (Race)</td>
<td>Saudi Nationals</td>
<td>166.00</td>
<td>59.07</td>
</tr>
<tr>
<td></td>
<td>Other Nationalities</td>
<td>115.00</td>
<td>40.92</td>
</tr>
<tr>
<td>Age</td>
<td>Up to 20 Years</td>
<td>5.00</td>
<td>01.77</td>
</tr>
<tr>
<td></td>
<td>21-30</td>
<td>45.00</td>
<td>16.01</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>115.00</td>
<td>40.92</td>
</tr>
<tr>
<td></td>
<td>41-50</td>
<td>94.00</td>
<td>33.45</td>
</tr>
<tr>
<td></td>
<td>50 &amp; above</td>
<td>22.00</td>
<td>07.82</td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>233.00</td>
<td>82.91</td>
</tr>
<tr>
<td></td>
<td>Non-Married</td>
<td>48.00</td>
<td>17.08</td>
</tr>
<tr>
<td>Education</td>
<td>Diploma/Certificate/etc.</td>
<td>20.00</td>
<td>07.11</td>
</tr>
<tr>
<td></td>
<td>Undergraduate</td>
<td>60.00</td>
<td>21.35</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>158.00</td>
<td>56.22</td>
</tr>
<tr>
<td></td>
<td>PhD</td>
<td>43.00</td>
<td>15.30</td>
</tr>
<tr>
<td>Occupation</td>
<td>Employee(full-time)</td>
<td>151.00</td>
<td>53.73</td>
</tr>
<tr>
<td></td>
<td>Student</td>
<td>36.00</td>
<td>12.81</td>
</tr>
<tr>
<td></td>
<td>Own Business</td>
<td>42.00</td>
<td>14.94</td>
</tr>
<tr>
<td></td>
<td>Re-tired</td>
<td>15.00</td>
<td>05.33</td>
</tr>
<tr>
<td></td>
<td>Unemployed</td>
<td>37.00</td>
<td>13.16</td>
</tr>
</tbody>
</table>

4.3 Validity and reliability

Reliability refers to the consistency and stability of a measure over time and across different contexts or situations. Internal consistency reliability, specifically, refers to the degree to which items in a scale or test are interrelated and measure the same construct (Alflayyeh et al., 2020).

Cronbach's alpha is one of the most widely used measures of internal consistency reliability, as it calculates the extent to which items in a scale or test are correlated with each other (Cronbach, 1951). Validity, on the other hand, refers to the extent to which a measure assesses what it claims to measure. It is essential to establish the validity of a measure to ensure that it accurately reflects the construct being measured. There are different types of validity, including content validity, criterion-related validity, and construct validity. Cronbach's alpha however, can help evaluate the validity of a measure indirectly, by providing evidence for the internal consistency of the items in a scale or test. If the items are consistent and measure the same underlying construct, it can be inferred that the scale or test has construct validity.

In summary, Cronbach's alpha is a measure of internal consistency reliability that assesses the extent to which items in a scale or test are correlated with each other. It indirectly provides evidence for construct validity by indicating the consistency of the items in measuring the same underlying construct. 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).
Table 2. Cronbach’s Alpha Values Results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach Alpha Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Administration (HCA)</td>
<td>0.822</td>
</tr>
<tr>
<td>Quality of Health Care (QHC)</td>
<td>0.954</td>
</tr>
<tr>
<td>Overall Health Facility (OHF)</td>
<td>0.991</td>
</tr>
<tr>
<td>Patient Re-patronage Behavior (PRB)</td>
<td>0.829</td>
</tr>
</tbody>
</table>

4.4 Standard deviation and mean value

Standard deviation and mean value are both important measures of central tendency and variability in statistics. The mean value, also known as the arithmetic mean, is a measure of central tendency that represents the average of a set of numerical data. It is calculated by adding up all the values in the dataset and dividing by the total number of values. The mean is sensitive to extreme values or outliers, which can significantly influence its value. Standard deviation, on the other hand, is a measure of variability that indicates how much the data deviates from the mean. It is calculated by taking the square root of the average squared difference of each value from the mean. A high standard deviation indicates that the data is more spread out, while a low standard deviation indicates that the data is more tightly clustered around the mean.

In general, the mean value and standard deviation are used together to provide a more complete description of a dataset. The mean gives an idea of the central tendency of the data, while the standard deviation gives an idea of the spread or variability of the data around the mean. In Table 3 below, all the values however shows that mean and standard deviation values are middle to the mean level and fulfilling the required criteria (Table 3).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Mean Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Care Administration (HCA)</td>
<td>4.261</td>
<td>0.732</td>
<td>Middle</td>
</tr>
<tr>
<td>Quality of Health Care (QHC)</td>
<td>4.103</td>
<td>0.743</td>
<td>Middle</td>
</tr>
<tr>
<td>Overall Health Facility (OHF)</td>
<td>4.279</td>
<td>0.700</td>
<td>Middle</td>
</tr>
<tr>
<td>Patient Re-patronage Behavior (PRB)</td>
<td>4.729</td>
<td>0.799</td>
<td>Middle</td>
</tr>
</tbody>
</table>

4.5 Hypotheses and correlation test

A hypothesis is a statement or assumption about a population parameter, based on limited sample data. Hypothesis testing involves comparing sample data to (often denoted as H), which represents the default position that there is no significant difference between the sample and the population. If the sample data provides sufficient evidence to reject the null hypothesis, an alternative hypothesis (often denoted as Ha) is accepted, indicating that there is a significant relationship or difference between the variables being studied.

A correlation test, on the other hand, measures the strength and direction of the relationship between two variables. The most commonly used correlation coefficient is Pearson's correlation coefficient (r), which ranges from -1 to +1. A value of -1 indicates a perfect negative correlation, a value of +1 indicates a perfect positive correlation, and a value of 0 indicates no correlation between the variables.

In hypothesis testing, correlations can be used to test alternative hypotheses about the relationship between two variables. For example, suppose we want to test the hypothesis that there is a positive correlation between a person's age and their income. We could collect data on the age and income of a sample of individuals and use a correlation test to determine the strength and direction of the relationship between these variables. If the correlation coefficient is significantly different from 0, we could reject the null
hypothesis that there is no correlation and accept the alternative hypothesis that there is a positive correlation between age and income. Hypotheses and correlation tests are both important tools in statistics for evaluating relationships between variables. Hypothesis testing involves comparing sample data to a null hypothesis to determine whether there is a significant difference or relationship between variables, while correlation tests measure the strength and direction of the relationship between variables.

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 care administration, quality of health care, overall health facility and patient re-patronage behavior, tested using SPSS application for correlation. Rule of thumb suggested that values 0.01 are considered as significant at two tailed (table 4).

Table 4. Hypotheses Correlation Test

<table>
<thead>
<tr>
<th>Health Care Administration</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Health Care Administration</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Quality of Health Care</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Overall Health Facility</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Patient Re-Patronage Behavior</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=281</td>
<td>.512**</td>
<td>.000</td>
<td>N=281</td>
<td>.566**</td>
<td>.000</td>
<td>N=281</td>
<td>.433**</td>
<td>.000</td>
<td>N=281</td>
<td>.576**</td>
<td>.000</td>
<td>N=281</td>
<td>.543**</td>
<td>.000</td>
</tr>
</tbody>
</table>

Correlations are significant at 0.01 level (2-tailed)

5. RESULTS

Table 5 below shows the considered hypotheses and results. Where the H₁ links (Health care administration) and (Quality of health care) and found significant at (0.000) and calculated the t-value with 8.122, and thus found positive. Similarly, link between (Quality of health care) and (Overall health facility) were tested as H₂ and found it significant at (0.000), whereas, the t-value 7.987, thus based on these values link considered as positive. Similarly, H₃ that links between (quality of health care) and (Patient re-patronage behavior) were also found significant at (0.000), and the t-value recorded as 8.133, based on the mentioned values thus, this link has been found positive. H₄ linked between (Overall health facility) and (Patient re-patronage behavior) is also found significant at (0.000), and t-value counted as 8.355, and thus this link also been found positive.
Table 5. Hypotheses Results

<table>
<thead>
<tr>
<th>Constructs</th>
<th>t-value</th>
<th>Significant</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Health Care administration → Quality of Health Care</td>
<td>8.122</td>
<td>0.000</td>
<td>Positive</td>
</tr>
<tr>
<td>H2 Quality of Health Care → Overall Health Facility</td>
<td>7.987</td>
<td>0.000</td>
<td>Positive</td>
</tr>
<tr>
<td>H3 Quality of Health Care → Patient Re-Patronage Behavior</td>
<td>8.133</td>
<td>0.000</td>
<td>Positive</td>
</tr>
<tr>
<td>H4 Overall Health facility → Patient Re-Patronage Behavior</td>
<td>8.355</td>
<td>0.000</td>
<td>Positive</td>
</tr>
</tbody>
</table>

6-DISCUSSION

Descriptive analysis of the data set is presented in the earlier section. And the respondents' demographics, such as age, gender, nationality, education level, marital status, monthly income, and occupation are analyzed, according to previous international studies (Lim et al., 2007; Ibrahim & Alqaydi, 2013; Purba et al., 2018). Total valid responses were calculated as 281, out of which 186 were male and 95 were female. Respondents where 166 counted as Saudi nationals and 115 were having other nationalities.

Descriptive analysis further provides a breakdown of the respondents' demographics. The maximum respondents were counted as male (66.19%), and maximum were Saudi local nationals (59.07%). Age group, the maximum respondents were from 31-40, and considered as 40.92%. Married respondents were counted as 233 which are 82.91%, however, only 48 respondents were non-married and counted as 17.08%. Similarly, maximum respondents were graduate with 56.22%. Maximum respondents were employees as full time and they were counted as 53.73%.

Validity for the items were checked through using Cronbach alpha. Minimum and required criteria for the test were set at 0.70, and the results are presented in Table 2. All constructs, including Health care administration, quality of health care, overall health facility and patient re-patronage behavior fulfilled the required criteria.

Similarly, standard deviation and mean value were also calculated to measure the variability and the average dataset of the constructs. Table 3 in the upper section however presents the mean, standard deviation, and mean level of each construct.

7. CONCLUSION

The findings of the study showed that there is a positive association between health administration and quality of health care, in addition quality of health care has also impact on overall health facility and patient re-patronage behavior, additionally study also found the positive relationship between overall health facility and patient re-patronage behavior. Thus, all the relationships of the study were found positive and witnessed a strong relationship with each other’s.

8-STUDY LIMITATION AND FUTURE DIRECTIONS

Present study however provides valuable information but still future directions can be considered. This study was conducted in Saudi Arabia, future studies can be conducted in other countries with the same constructs and approaches. Secondly, present study considered 4 (four) constructs, future studies can consider more constructs and add or remove any construct. Thirdly, future studies can consider any moderating variable. Fourthly, future studies can consider the same study framework with different path analysis. Fifthly, future studies can consider qualitative approach since present was quantitative approach.
REFERENCES


