

Healthcare Sector Service Quality & Residents' Satisfaction in Ajman, as a Model for Emerging Countries

Hajar Al Hubaishi
Ajman Statistics Centee

ABSTRACT

The purpose of this paper is to identify Ajman residents' satisfaction on healthcare service. The proposed measurement for Ajman Residents' Satisfaction was tested using data collected from the three areas of Ajman, namely Ajman City, Masfout, and Manama. A total of 95,531 households are living in the Emirate of Ajman. Out of these 1,167 households' responses were collected. About 48.6% of them were United Arab Emirates (UAE) nationals and about 51.4% were foreign nationals. All of them were permanently residing in the Emirate of Ajman and has prior experience in availing any healthcare service in the same emirate. Data were analyzed using Microsoft Excel, the Statistical Package for the Social Sciences (SPSS) version 22. Findings show that in the government sector only tangible and empathy correlate positively with healthcare service quality, which also had a strong positive correlation with residents' satisfaction, while reliability, assurance and responsiveness were not sufficiently correlated to healthcare service quality. On the other hand, for the private sector, except for responsiveness, assurance and tangible dimensions, reliability and empathy correlate positively with healthcare service quality, which also had a strong, positive correlation with residents' satisfaction.

INTRODUCTION

Forward

This chapter discusses the rationale for this study of residents' satisfaction on healthcare services in the context of the Emirate of Ajman. This topic encompasses investigation of identification of the factors that influence healthcare service quality, the relationship between healthcare service quality and residents' satisfaction. This chapter also covers the significance of quality healthcare services and residents' satisfaction. The purpose of this chapter is to identify research objectives, define the research question, and outline the research framework used in this study.

The Healthcare sector has also gained attention from researchers over the past years, whether it's private or government, seeking solutions to the existing problems or aiming for modernization. As the population grows, its needs change as well in volume, facilities, expertise and supplies. The World Health Organization has defined in 2019, quality of care as "the extent to which health care services provided to individuals and patient populations improved the desired health outcomes. To achieve this, health care must be safe, effective, timely, efficient, equitable and people-centered. It is important that patients are assured that the health care services are safe, risk-free, preventing further injuries and medical malpractices.

The healthcare system in the United Arab Emirates is regulated at both Federal and Emirate level. Several health ministries and authorities, administer the public healthcare services such as the Ministry of Health and Prevention, Health Authority-Abu Dhabi (HAAD), the Dubai Health Authority (DHA) and the Emirates Health Authority (EHA). Health care in UAE has been funded mainly by the Government, to date the infectious diseases such as malaria, measles, poliomyelitis that were once rampant in the UAE have been eliminated. Currently, the Government is focusing on the modernization and reform of health care sector enhancing the service through public – private partnership.

Healthcare Services in the Emirate of Ajman

According to the study conducted by the US - UAE Business Council, on UAE healthcare sector (2018), the country's health sector has dramatically expanded over the past four decades; from just seven hospitals and 12 health centers in 1971 to over 126 public and private hospitals with a combined bed capacity of more than 12, 000 according to the latest statistics data provided by the statistics authority in the UAE for 2015. With the growing size of the population, it is the desire of the nation to become a "regional medical tourism hub". According to 2017 Ajman Statistics data, the healthcare sector in the Emirate of Ajman has 3,445 healthcare practitioners and has 4 government and 2 private hospitals with complete facilities and combined bed capacity of 404. Aside from these, there are 181 clinics both for adults and infants including general dental clinics, and a network of pharmacies.

For Ajman government to align with the country's vision in the healthcare sector, this study is expected to hear the voice of its residents. Their awareness of healthcare services matters in this study and how satisfied they are with the current healthcare services they avail or receive. The target respondents of this study are from Ajman city, Masfout and Manama.

Significant improvements in the healthcare services over the past years were observed. One of these was through immunization that prevented outbreaks of communicable diseases that resulted to prolong life. Governments from different countries are exhausting their resources to provide better well-being for their residents in terms of healthcare services. In the Arab culture, citizen's expectations from governments regarding provision of quality public services are rising. The primary responsibility of governments is to deliver the essential services to their community. For emirates like Abu Dhabi and Dubai, healthcare system was governed by their own health authorities. These health authorities strategize, monitor and analyze both the health status and healthcare system performance of their respective emirates. In the case of Ajman, it is part of the northern emirates which is under the umbrella of the Federal Ministry of Health and Prevention.

Local governments of these emirates provide the basic services that communities need in the absence of private providers, or in some cases, costs are subsidized to provide the services at affordable cost to their community.

The health care system in general has the influence on how health services are provided to the community and the importance of measuring the residents' satisfaction on the available healthcare services will determine the level of performance of the emirate. Healthcare service quality may affect the decision of the residents to avail the healthcare services within the Emirate of Ajman. If the quality they received is not aligned with what they desire to receive,

then it could be a reason for them to find an alternative service provider. In a fast-phasing environment with competitive healthcare services, residents have plethora of healthcare services to choose from in other emirates, as healthcare providers can no longer disregard the level of quality of the services they provide.

The factors that influence the quality of healthcare services they provide to their residents affect the residents' satisfaction. Although there are efforts to improve the current healthcare services, yet ignoring other factors such as responsiveness to emergency cases, empathy in understanding the needs of the residents as customers or patients, assuring them that the healthcare practitioners have adequate knowledge and competence, reliability and quality of the healthcare services provided, and availability of the needed supplies and equipment to support the healthcare services that may affect the healthcare service industry in the long run.

The definitive goal of this study is to measure the residents' satisfaction in healthcare services. The healthcare providers should understand the indicators important to their stakeholders, especially the residents as customers or patients, not to overlook the areas that need improvement. Therefore, it is important to learn more about the service quality that pertains to healthcare services. By developing a tool to beseech information from Ajman residents to measure and interpret the level of service quality they received in relation to their experience in availing healthcare services in the Emirate of Ajman.

Research Questions and Objectives

The research questions and objectives are designed to explore the factors affecting service quality, examine the relationship between quality and user satisfaction, and assess the overall satisfaction level of service users. They serve as a guide to identify key areas for improvement and to understand how services can better meet the needs and expectations of the community. These questions and objectives are shown in the following Table.

Table 1.3: Research Questions and Objectives

| Research Question | Research Objectives |
|--|---|
| What factors influence healthcare service quality in Emirate of Ajman? | To determine the factors that influence the healthcare service quality provided within Emirate of Ajman. |
| What is the relationship between healthcare service quality and residents' satisfaction? | To get a deep insight into the influence of factors that have been identified in study in accordance with residents' perception. To determine the relationship between the quality of healthcare service and the residents' satisfaction |
| What is the residents' satisfaction level on availed healthcare services? | To determine residents' level of satisfaction on availed healthcare services |

Research Scope

The scope of this study is to measure residents' satisfaction with healthcare services, to identify and gain deep insight into evaluations regarding factors that influence healthcare quality service and residents' satisfaction and the relationship. A conceptual model that describes interactions among all factors was developed. This study targeted UAE national and non-UAE national residents of the Emirate of Ajman, who availed healthcare services. Based on the statistical poll made available by Ajman Census in 2017, about 95,531 households are situated

in the Emirate of Ajman. A total of 1,233 households were targeted in each study, with a minimum of 1,000 responses ensured per study, combining both UAE nationals and non-UAE nationals across the areas of Ajman City, Manama, and Mafout.

Significance of the Study

Aside from adopting standard scientific design and implementation procedures, the significance of this study is in establishing a baseline for satisfaction studies and documentation for future references and enabling the concerned decision makers to identify priority areas for improvement, using residents' perspective and focus all efforts on enhanced healthcare in the Emirate of Ajman.

RESEARCH METHODOLOGY

Introduction

This chapter describes the process followed in conducting the Ajman residents' satisfaction study. It contains the following subsections: research questions, sampling, designing the questionnaire, data collection, data analysis, To examine the three elements related to healthcare service quality and residents' satisfaction: that is, factors that influence healthcare service quality in Emirate of Ajman; the relationship between healthcare service quality and residents' satisfaction; and residents' satisfaction level on availed healthcare services.

The purpose of this study addresses the following:

1. Are the service quality dimensions (tangible, reliability, responsiveness, assurance, empathy) correlate positively with healthcare service quality?
2. Are healthcare service quality correlates positively with resident s' satisfaction?
3. What is the residents' satisfaction level on availed healthcare services?

Sampling

The Emirate of Ajman has 95,531 households based on the data collected in 2017 Census by the Ajman Statistics Center. These administrative records were used to compute the sample needed to do the study survey. The respondent selection was in random sampling; the goal is to have respondents both for UAE national and non-UAE national residents. The total respondents for UAE national are 567 and non-UAE national residents are 600 each with 5% margin of error (MOE) at 95% confidence level (CL). This sample size is applicable to the three areas identified in scope of this study. The respondents are 18 years of age and above, both UAE national and non-UAE national residents in the region and have prior experience of availing the healthcare service. The respondents were selected randomly which means that groups of different social class, occupation, and income strata and geographic proximity to government presence will have an equal chance to participate in the study.

RESEARCH FINDINGS

Forward

The objectives of the study were to identify and understand factors that influence residents' perspective by measuring their satisfaction with healthcare services.

The Basic Characteristics of the Sample Population

The total number of households identified and visited was 1,391. Out of which, 125 households did not meet the eligibility criteria and were classified as non-qualifiers (8.9%), while 2

households did not complete the interview (0.3%). The remaining 1,264 households successfully completed the survey, accounting for 90.8% of the total valid respondents.

Following quality control and validation procedures, 97 completed surveys (6.9%) and were rejected. As a result, the final number of completed and verified valid interviews used for analysis stood at 1,167 households, representing 83.9% of total valid respondents. As depicted by the following Table.

Table 2: The Percentage distribution of Completion Rate

| Completion Rate | n | % | Remarks |
|---------------------------------|-------|-------|------------------------------|
| Total visited | 1,391 | 100% | - |
| Non-Qualifier ,screening failed | 125 | 8.9% | From Total visited |
| Not completed | 2 | 0.3% | From Total visited |
| Total Completed Survey | 1,264 | 90.8% | From Total valid respondents |
| QC Rejected | 97 | 6.9% | From Total valid respondents |
| Total Valid Survey | 1,167 | 83.9% | From Total valid respondents |

Source: Ajman Statistics Center

The Survey Results

Household Role:

The following Table presents the classification of respondents according to their role in the household. Most of respondents in the Emirate of Ajman were the spouse (47.2%), head of household/breadwinner (33.7%). Sons or daughters accounted for 15.5% of respondents, while the proportions for father/mother (1.2%), brother/sister (1.0%), relatives (0.6%), and grandson/granddaughter (0.2%) were much smaller.

Ajman City reflects a similar pattern to the emirate overall, with 48.0% of respondents being spouses and 32.7% being heads of household. In Manama, the proportion of spouses was 41.5%, followed by heads of household at 28.3% and sons/daughters at 26.4%. In Masfout, heads of household/breadwinners dominate at 62.2%, while spouses make up 35.6% of respondents; and all other categories are negligible or not represented, as presented by the following Table.

Table 3: The Percentage distribution of Respondents by Household Role

| Household Role | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|--------------------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Spouse | 513 | 48.0% | 22 | 41.5% | 16 | 35.6% | 551 | 47.2% |
| Head of household /Breadwinner | 350 | 32.7% | 15 | 28.3% | 28 | 62.2% | 393 | 33.7% |
| Son/Daughter | 167 | 15.6% | 14 | 26.4% | 0 | 0.0% | 181 | 15.5% |
| Father/Mother | 13 | 1.2% | 1 | 1.9% | 0 | 0.0 % | 14 | 1.2% |
| Brother/Sister | 11 | 1.0% | 1 | 1.9% | 0 | 0.0 % | 12 | 1.0% |
| Relative | 7 | 0.7% | 0 | 0.0 % | 0 | 0.0% | 7 | 0.6% |
| Grandson/ granddaughter | 2 | 0.2% | 0 | 0.0% | 0 | 0.0% | 2 | 0.2% |
| Others* | 6 | 0.6% | 0 | 0.0 % | 1 | 2.2% | 7 | 0.6% |

Source: Ajman Statistics Center

Household Size:

Most of the respondents' household sizes ranged from 3 to 5 members, representing 46.4% of the total, followed by households with 6 to 10 members at 42.6%. Smaller households with 1 to 2 members comprised 3.4%, while larger households with 11 to 15 members accounted for 6.4%. Very few respondents reported living in households with 16 to 20 members (1.1%) or 21 members and above (0.1%).

In Ajman City, the majority lived in households with 3 to 5 members, accounting for (48.2%) and 6 to 10 members (40.8%). In Manama, the distribution is ranged between 3 to 5 members (20.8%) and 6 to 10 members (58.5%), while Mafout has the highest proportion in the 6-to-10-member category (66.7%).

Table 4: The Percentage distribution of Respondents by Household Size

| Household Count | Ajman City | | Manama | | Mafout | | Emirate of Ajman | |
|-----------------|------------|-------|--------|-------|--------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| 1 - 2 | 39 | 3.6% | 1 | 1.9% | 0 | 0.0% | 40 | 3.4% |
| 3 - 5 | 515 | 48.2% | 11 | 20.8% | 15 | 33.3% | 541 | 46.4% |
| 6 - 10 | 436 | 40.8% | 31 | 58.5% | 30 | 66.7% | 497 | 42.6% |
| 11 - 15 | 68 | 6.4% | 7 | 13.2% | 0 | 0.0 % | 75 | 6.4% |
| 16 - 20 | 11 | 1.0% | 2 | 3.8% | 0 | 0.0% | 13 | 1.1% |
| ≥ 21 | 0 | 0.0 % | 1 | 1.9% | 0 | 0.0% | 1 | 0.1% |

Source: Ajman Statistics Center

Age Distribution:

Across the Emirate of Ajman, most respondents were aged 40–59 years, representing 42.8% of the total, followed by those aged 30–39 years at 33.1%. Respondents aged 18–29 years accounted for 16.2%, while those aged 60 and above represented the smallest proportion at 7.9%. Ajman City reflects a similar pattern, with 42.0% of respondents aged 40–59, followed by 30–39 (33.0%) and 18–29 (16.6%). In Manama, the largest group was 40–59 years (39.6%), followed by 30–39 years (35.8%), 18–29 years (20.8%), and 60+ (3.8%). In Mafout, a significant majority of respondents were aged 40–59 (66.7%), followed by 30–39 years (31.1%), with very low representation in the 18–29 age group (2.2%) and none in the 60+ group.

Table 5: The Percentage distribution of Respondents by Age Distribution

| Respondent Age group | Ajman City | | Manama | | Mafout | | Emirate of Ajman | |
|----------------------|------------|-------|--------|-------|--------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| 18 - 29 | 177 | 16.6% | 11 | 20.8% | 1 | 2.2% | 189 | 16.2% |
| 30 - 39 | 353 | 33.0% | 19 | 35.8% | 14 | 31.1% | 386 | 33.1% |
| 40 - 59 | 449 | 42.0% | 21 | 39.6% | 30 | 66.7% | 500 | 42.8% |
| 60+ | 90 | 8.4% | 2 | 3.8% | 0 | 0.0% | 92 | 7.9% |

Source: Ajman Statistics Center

Nationality Distribution:

The study sample was structured to include both UAE nationals and non-UAE nationals to enable a comprehensive analysis. According to following Table, non-UAE nationals made up 51.4% of the total respondents across the Emirate of Ajman, while UAE nationals accounted for

48.6%. In Ajman City, non-UAE nationals were the majority at 53.8%, compared to 46.2% UAE nationals. In Manama, the trend reversed, with UAE nationals comprising 69.8%, and non-UAE nationals only 30.2%. Masfout had the highest proportion of UAE nationals at 80.0%, and only 20.0% non-UAE nationals.

Table 6: The Percentage distribution of Respondents by Nationality Distribution

| Nationality | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| UAE National | 494 | 46.2% | 37 | 69.8% | 36 | 80.0% | 567 | 48.6% |
| Non-UAE National | 575 | 53.8% | 16 | 30.2% | 9 | 20.0% | 600 | 51.4% |

Source: Ajman Statistics Center

Gender Distribution:

The study sample shows a gender distribution where male respondents constitute a larger proportion of the sample. As illustrated in the Table below, male respondents accounted for 49.2% (574 individuals) of the total, while female respondents made up 50.8% (593 individuals). By region, Ajman City had the highest proportion of male respondents at 50.9%, followed by Masfout at 31.1% and Manama at 30.2%. In contrast, female respondents were the majority in all three regions, with Manama having the highest proportion of female respondents at 69.8%, followed by Masfout at 68.9% and Ajman City at 49.1%. This highlights a regional variation in gender participation, particularly with stronger female representation across most regions.

Table 7: The Percentage distribution of Respondents by Gender Distribution

| Gender | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|--------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Male | 544 | 50.9% | 16 | 30.2% | 14 | 31.1% | 574 | 49.2% |
| Female | 525 | 49.1% | 37 | 69.8% | 31 | 68.9% | 593 | 50.8% |

Source: Ajman Statistics Center

Civil Status Distribution:

Distribution of respondents by marital status is shown in the following Table. The highest proportion of respondents across the Emirate of Ajman were married (81.1%), followed by singles (14.6%), divorced (2.3%), and widowed (2.0%). In all of the three regions, the majority of respondents were married. Masfout had the highest percentage of married respondents at 93.3%, while Ajman City and Manama followed with 80.9% and 75.5% respectively. The second highest group in Ajman City and Manama were singles, at 15.0% and 17.0%, respectively. In Masfout, however, widows made up the second highest proportion at 5.7%.

Table 8: The Percentage distribution of Respondents by Civil Status

| Civil Status | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|--------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Married | 865 | 80.9% | 40 | 75.5% | 42 | 93.3% | 947 | 81.1% |
| Single | 160 | 15.0% | 9 | 17.0% | 1 | 2.2% | 170 | 14.6% |
| Divorce | 24 | 2.2% | 1 | 1.9% | 2 | 4.4% | 27 | 2.3% |
| Widow | 20 | 1.9% | 3 | 5.7% | 0 | 0.0% | 23 | 2.0% |

Source: Ajman Statistics Center

Highest Educational Attainment:

Educational attainment of respondents is presented in the following Table. The highest proportion of respondents across the Emirate of Ajman held a bachelor's degree (41.2%), followed by those who completed high school (32.2%). Respondents with less than secondary education made up 9.1%, while diploma holders accounted for 9.3%. A smaller portion of respondents had attained a master's degree (3.9%), and 3.4% were illiterate, and 0.9% Ph.D. Ajman City reflects a similar pattern to the emirate overall, While, Masfout had the highest percentage of bachelor's degree holders at 57.8%, while Manama had the highest proportion of high school graduates at 45.3% and the highest rate of illiteracy at 5.7%.

Table 9: The Percentage distribution of Respondents by Educational Attainment

| Educational Attainment | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|------------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Illiterate | 36 | 3.4% | 3 | 5.7% | 1 | 2.2% | 40 | 3.4% |
| Less than secondary | 93 | 8.7% | 12 | 22.6% | 1 | 2.2% | 106 | 9.1% |
| High school | 336 | 31.4% | 24 | 45.3% | 16 | 35.6% | 376 | 32.2% |
| Diploma | 104 | 9.7% | 4 | 7.5% | 1 | 2.2% | 109 | 9.3% |
| Bachelor | 446 | 41.7% | 9 | 17.0% | 26 | 57.8% | 481 | 41.2% |
| Master | 44 | 4.1% | 1 | 1.9% | 0 | 0.0% | 45 | 3.9% |
| Ph. D | 10 | 0.9% | 0 | 0.0% | 0 | 0.0% | 10 | 0.9% |

Source: Ajman Statistics Center

Years of Living in Ajman:

The following Table presents the distribution of respondents by duration of stay in the Emirate of Ajman. The highest proportion of respondents have lived in Emirate of Ajman for more than 30 years (26.9%), followed by those who have stayed for 6-10 years (15.9%), and 3-5 years (15.3%). Only 3.3% of respondents have lived in Ajman for less than a year. Regionally, Masfout and Manama show a strong concentration of long-term residents, with 66.7% and 71.7% respectively having resided there for over 30 years. In contrast, Ajman City displays a more balanced distribution across different residency durations, though it also has a significant share (23.0%) of long-term residents.

Table 10: The Percentage distribution of Respondents by Years of Living in Ajman

| Years of residency in Ajman | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|-----------------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| less than 1 year | 38 | 3.6% | 0 | 0.0% | 0 | 0.0% | 38 | 3.3% |
| 1 - 2 years | 141 | 13.2% | 0 | 0.0% | 0 | 0.0% | 141 | 12.1% |
| 3 - 5 years | 176 | 16.5% | 3 | 5.7% | 0 | 0.0 % | 179 | 15.3% |
| 6 - 10 years | 182 | 17.0% | 2 | 3.8% | 2 | 4.4% | 186 | 15.9% |
| 11 - 15 years | 108 | 10.1% | 6 | 11.3% | 3 | 6.7% | 117 | 10.0% |
| 16 - 20 years | 76 | 7.1% | 2 | 3.8% | 7 | 15.6% | 85 | 7.3% |
| 21 - 30 years | 102 | 9.5% | 2 | 3.8% | 3 | 6.7% | 107 | 9.2% |
| More than 30 years | 246 | 23.0% | 38 | 71.7% | 30 | 66.7% | 314 | 26.9% |

Source: Ajman Statistics Center

Work Location:

The following Table shows the distribution of respondents based on their place of work. At the Emirate level, Dubai has the most common work location, accounting for 41.6% of respondents,

followed by Ajman (30.0%), Sharjah (15.8%), and Abu Dhabi (9.4%). Other emirates such as Fujairah, Ras Al Khaimah, and Umm Al Quwain together make up only a small fraction (each around 1%). In Ajman City, the distribution mirrors the emirate-level trend, with 42.7% of respondents working in Dubai, 29.3% in Ajman, and 16.6% in Sharjah. In Manama, the most common work location is Abu Dhabi (33.3%), followed by Ajman (23.8%), Dubai (19.0%), and Sharjah (9.5%). In Masfout, half of the respondents (50.0%) work in Ajman, followed by 30.0% in Dubai and 16.7% in Abu Dhabi.

Table 11: The Percentage distribution of Respondents by Work Location

| Work location | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|----------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Dubai | 307 | 42.7% | 4 | 19.0% | 9 | 30.0% | 320 | 41.6% |
| Ajman | 211 | 29.3% | 5 | 23.8% | 15 | 50.0% | 231 | 30.0% |
| Sharjah | 119 | 16.6% | 2 | 9.5% | 1 | 3.3% | 122 | 15.8% |
| Abu Dhabi | 60 | 8.3% | 7 | 33.3% | 5 | 16.7% | 72 | 9.4% |
| Fujairah | 6 | 0.8% | 3 | 14.3% | 0 | 0.0% | 9 | 1.2% |
| Ras Al Khaimah | 8 | 1.1% | 0 | 0.0 % | 0 | 0.0% | 8 | 1.0% |
| Umm Al Quwain | 8 | 1.1% | 0 | 0.0 % | 0 | 0.0% | 8 | 1.0% |

Source: Ajman Statistics Center

Job Sector:

The following Table presents the job sector distribution of respondents. At the emirate level, 52.9% of respondents work in the private sector, followed by 26.6% in the federal government, and 20.5% in the local government. Ajman City follows a similar trend, with the majority (55.6%) employed in the private sector. In contrast, Manama and Masfout show a different pattern, where the majority of respondents are employed in the federal government, accounting for 38.1% and 46.7%, respectively. Additionally, 42.9% of respondents in Manama and 43.3% in Masfout work in the local government, while private sector employment remains the lowest in these areas.

Table 12: The Percentage distribution of Respondents by Job Sector

| Job Sector | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Private | 400 | 55.6% | 4 | 19.0% | 3 | 10.0% | 407 | 52.9% |
| Federal | 183 | 25.5% | 8 | 38.1% | 14 | 46.7% | 205 | 26.6% |
| Local | 136 | 18.9% | 9 | 42.9% | 13 | 43.3% | 158 | 20.5% |

Source: Ajman Statistics Center

Medical Insurance:

According to following Table, around 71.6% of respondents in the Emirate of Ajman have medical insurance. Of whom, 43.8% are covered by government insurance, and 27.8% by private insurance, while 28.4% of respondents are not insured. In Masfout, the vast majority (91.1%) are covered by government insurance, with only 2.2% relying on private insurance and 6.7% having no insurance. In Manama, 66.0% are covered by government insurance, 9.4% by private insurance, and 24.5% have no insurance. In Ajman City, 40.7% are covered by the government, 29.7% by private insurers, and 29.6% have no insurance.

Table 13: The Percentage distribution of Respondents by Type of Medical Insurance

| Type of Medical Insurance | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|---------------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Government | 435 | 40.7% | 35 | 66.0% | 41 | 91.1% | 511 | 43.8% |
| Private | 318 | 29.7% | 5 | 9.4% | 1 | 2.2% | 324 | 27.8% |
| No Insurance | 316 | 29.6% | 13 | 24.5% | 3 | 6.7% | 332 | 28.4% |

Source: Ajman Statistics Center

Monthly Income:

The following Table presents the distribution of respondents by categories of monthly income. The largest proportion of respondents in the Emirate of Ajman earned between 5,000 and 9,999 Dirhams, accounting for 26.8 percent. This was followed by those earning less than 5,000 Dirhams (17.1%), 25,000 Dirhams and above (16.5%), and 10,000 to 14,999 Dirhams (16.4%). The proportions of respondents earning 15,000–19,999 and 20,000–24,999 Dirhams were 12.2 percent and 11 percent, respectively. Ajman City exhibited a similar income distribution pattern. In Manama, the majority of respondents earned 25,000 and above (47.2%), while the income group less than 5,000 Dirhams (18.9%). In Masfout, the highest share of respondents earned 25,000 Dirhams and above (48.9%), indicating a concentration of higher-income individuals in that region.

Table 14: he Percentage distribution of Respondents by Monthly Income

| Monthly Income Range | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|----------------------|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Less than 5,000 | 186 | 17.4% | 10 | 18.9% | 4 | 8.9% | 200 | 17.1% |
| 5,000 - 9,999 | 300 | 28.1% | 6 | 11.3% | 7 | 15.6% | 313 | 26.8% |
| 10,000 - 14,999 | 184 | 17.2% | 4 | 7.5% | 3 | 6.7% | 191 | 16.4% |
| 15,000 - 19,999 | 133 | 12.4% | 4 | 7.5% | 5 | 11.1% | 142 | 12.2% |
| 20,000 - 24,999 | 120 | 11.2% | 4 | 7.5% | 4 | 8.9% | 128 | 11.0% |
| 25,000 and above | 146 | 13.7% | 25 | 47.2% | 22 | 48.9% | 193 | 16.5% |

Source: Ajman Statistics Center

Safety Measures:

Aside from collecting data on satisfaction with Infrastructure being utilized and characteristics pertaining to the respondents and household, additional data were collected regarding safety measures available at the household especially regarding protection from fire. The following Table shows that around 48.3% of households in the Emirate of Ajman reported having a fire alarm in their building. This feature was most prevalent in Ajman City (52.0%), followed by Manama (13.2%) and Masfout (2.2%). Regarding fire extinguishers, about 51.0% of households across the emirate reported availability. Ajman City again had the highest share (54.2%), followed by Manama (28.3%) and Masfout (2.2%).

Table 15: he following Table presents Respondents by Type of Building Safety Measures Availability

| Building Safety Measures | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|-----------------------------|------------|-------|--------|-------|---------|------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Available fire extinguisher | 579 | 54.2% | 15 | 28.3% | 1 | 2.2% | 595 | 51.0% |
| Available fire alarm | 556 | 52.0% | 7 | 13.2% | 1 | 2.2% | 564 | 48.3% |

Source: Ajman Statistics Center

Analysis of Reliability:

Any research based on measurement must be concerned with the accuracy or dependability or, as we usually call it, reliability of measurement. The purpose of evaluating internal reliability of the questionnaire is to test the reliability of the dimensions used to measure each construct, with this Cronbach's alpha test being utilized. The test results by using SPSS 22 indicated that all item values were > 0.800 and were reliable to measure each construct.

In the following Table, Cronbach's alpha coefficient results presented for each dimension in the health care sector questions ranged from 0.886 to 0.930, which are all considered acceptable levels of internal consistency. Specifically, Tangibles and Reliability both recorded a value of 0.886, Empathy scored 0.887, Assurance showed a slightly higher value at 0.906, while Responsiveness and Quality shared the highest reliability score of 0.930. This confirms that the internal consistencies of the measures were verified, and each dimension reliably measured its corresponding construct.

Table 16: The following Table depicts the Results of Reliability – Health Care

| Construct | Number of Questions | Cronbach's Alpha |
|----------------|---------------------|------------------|
| Tangibles | 2 | 0.886 |
| Reliability | 3 | 0.886 |
| Responsiveness | 7 | 0.930 |
| Assurance | 3 | 0.906 |
| Empathy | 5 | 0.887 |
| Quality | 3 | 0.930 |

RESIDENTS' SATISFACTION RESULTS

Residents' Overall Satisfaction with Healthcare Services

The following Table presents the residents' overall satisfaction across various dimensions of healthcare services, including assurance, tangibles, reliability, quality, responsiveness, and empathy. Results show that 44.6% of respondents were very satisfied with the services received, while 49.2% were satisfied. On the other hand, only 2.2% were dissatisfied and 0.5% were very dissatisfied, indicating a generally high level of satisfaction with healthcare services in Ajman. However, **the satisfaction rate decreased this year compared to previous years due to the increase in sample size. Additionally, a question was added regarding the reasons for not using healthcare services.** Among the different dimensions, Tangibles received the highest proportion of very satisfied respondents (49.1%), followed closely by Reliability (48.5%) and Safety/Assurance (45.2%). The Quality Dimension also scored high, with 41.9% very satisfied and 53.1% satisfied. Empathy was the lowest-rated dimension, with 39.4% very satisfied and 50.7% satisfied, and it also showed the highest combined dissatisfaction at 4.5%. The following Table details the above results.

Overall, about 93.7% of respondents were either satisfied or very satisfied with the compiled dimensions of healthcare services in Ajman. The safety/assurance dimension received the highest satisfaction level at 96.5%, followed closely by tangibles (95.5%), reliability (95.1%), and quality (95.0%). The responsiveness dimension scored 90.1% satisfaction, while empathy had the lowest satisfaction level at 90.1%. Dissatisfaction remained low across all dimensions, with the highest being empathy at 4.5%, and the lowest in safety/assurance at 1.2%.

Table 17: The Percentage distribution of Residents' Overall Satisfaction on Healthcare Services

| Main Dimensions Satisfaction - Healthcare Services | Very Satisfied | Satisfied | Neutral | Dissatisfied | Very Dissatisfied |
|--|----------------|-----------|---------|--------------|-------------------|
| Safety / Assurance | 45.2% | 51.3% | 2.4% | 1.0% | 0.2% |
| Tangibles Elements | 49.1% | 46.4% | 2.5% | 1.8% | 0.2% |
| Reliability | 48.5% | 46.6% | 3.2% | 1.4% | 0.3% |
| Quality | 41.9% | 53.1% | 3.0% | 1.5% | 0.5% |
| Responsiveness | 43.3% | 46.8% | 5.8% | 3.4% | 0.8% |
| Empathy | 39.4% | 50.7% | 5.5% | 3.8% | 0.7% |
| Average | 44.6% | 49.2% | 3.7% | 2.2% | 0.5% |

Source: Ajman Statistics Center

Healthcare Service Performance and Improvement

Healthcare Service that Exceeds Expectations:

The following Table presents healthcare services that exceeded respondents' expectations across different areas in the Emirate of Ajman. Overall, provision of medicines had the highest proportion of delighted respondents, with 52.3 % across the emirate stating their expectations were exceeded. This was followed by doctors and medical services (36.5%) and vaccination of infants, children, and/or pregnant women (29.2%).

Table 17: The following Table shows the Healthcare Services that Exceeded Expectations of Ajman Residents*

| Healthcare Services | Ajman City | | Manama | | Masfout | | Emirate of Ajman | |
|---|------------|-------|--------|-------|---------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Provision of Medicines | 568 | 53.1% | 11 | 20.8% | 31 | 68.9% | 610 | 52.3% |
| Doctors and medical services | 394 | 36.9% | 9 | 17.0% | 23 | 51.1% | 426 | 36.5% |
| Vaccination of Infants, Children, and/or Pregnant Women | 300 | 28.1% | 36 | 67.9% | 5 | 11.1% | 341 | 29.2% |
| Control of Communicable Diseases | 277 | 25.9% | 6 | 11.3% | 18 | 40.0% | 301 | 25.8% |
| Basic Dental/ Oral Hygiene | 204 | 19.1% | 13 | 24.5% | 26 | 57.8% | 243 | 20.8% |
| Secondary/ Tertiary Health Care (In the hospital) | 212 | 19.8% | 0 | 0.0 % | 3 | 6.7% | 215 | 18.4% |
| Ambulance and emergency Services | 176 | 16.5% | 1 | 1.9% | 7 | 15.6% | 184 | 15.8% |
| Pre-natal Services | 161 | 15.1% | 0 | 0.0% | 5 | 11.1% | 166 | 14.2% |
| Family Planning/ Reproductive Health and /wellness services | 131 | 12.3% | 0 | 0.0 % | 5 | 11.1% | 136 | 11.7% |
| Medical fitness check-up | 106 | 9.9% | 15 | 28.3% | 1 | 2.2% | 122 | 10.5% |
| Nutritional Assistance | 103 | 9.6% | 1 | 1.9% | 1 | 2.2% | 105 | 9.0% |
| Home health care services | 87 | 8.1% | 0 | 0.0 % | 4 | 8.9% | 91 | 7.8% |
| Medical Records including birth/death records | 71 | 6.6% | 0 | 0.0% | 3 | 6.7% | 74 | 6.3% |
| Animal Health | 67 | 6.3% | 0 | 0.0% | 1 | 2.2% | 68 | 5.8% |
| Mobile healthcare | 55 | 5.1% | 0 | 0.0% | 3 | 6.7% | 58 | 5.0% |
| Financial aid for treatment | 47 | 4.4% | 0 | 0.0% | 5 | 11.1% | 52 | 4.5% |
| Environmental Health Field Inspection | 46 | 4.3% | 1 | 1.9% | 1 | 2.2% | 48 | 4.1% |
| Cosmetic and plastic surgery centers | 32 | 3.0% | 0 | %0.0 | 1 | 2.2% | 33 | 2.8% |

Source: Ajman Statistics Center

*Note: Multiple answers per respondent possible.

By area, Ajman City showed the strongest performance in the provision of medicines, with 53.1 % of respondents expressing exceeded expectations. In Manama, vaccination of Infants, Children, and/ or Pregnant Women received the highest satisfaction, with 67.9 % of respondents delighted, followed by medical fitness check-up with 28.3 %

In Mafout, exceeded expectations were primarily concentrated in provision of medicines (68.9%), basic dental/oral hygiene (57.8%), doctors and medical services (51.1%), control of communicable diseases (40.0%), and ambulance and emergency services (15.6%).

Suggested Room for Improvement in Healthcare Service:

Financial aid for treatment topped the list with 22.7 % of respondents across the emirate indicating it requires improvement, this was followed by basic dental/oral hygiene services with 22.3 %, and ambulance and emergency services with 18.3 %.

Table 18: The Suggested Room for Improvement in Healthcare Service*

| Healthcare Services | Ajman City | | Manama | | Mafout | | Emirate of Ajman | |
|---|------------|-------|--------|-------|--------|-------|------------------|-------|
| | n | % | n | % | n | % | n | % |
| Financial aid for treatment | 260 | 24.3% | 3 | 5.7% | 2 | 4.4% | 265 | 22.7% |
| Basic Dental/ Oral Hygiene | 247 | 23.1% | 8 | 15.1% | 5 | 11.1% | 260 | 22.3% |
| Ambulance and emergency Services | 184 | 17.2% | 25 | 47.2% | 4 | 8.9% | 213 | 18.3% |
| Doctors and medical services | 180 | 16.8% | 5 | 9.4% | 3 | 6.7% | 188 | 16.1% |
| Control of Communicable Diseases | 160 | 15.0% | 6 | 11.3% | 1 | 2.2% | 167 | 14.3% |
| Provision of Medicines | 138 | 12.9% | 10 | 18.9% | 0 | 0.0% | 148 | 12.7% |
| Home health care services | 129 | 12.1% | 17 | 32.1% | 1 | 2.2% | 147 | 12.6% |
| Secondary/ Tertiary Health Care (In the hospital) | 93 | 8.7% | 38 | 71.7% | 0 | 0.0 % | 131 | 11.2% |
| Environmental Health Field Inspection | 110 | 10.3% | 1 | 1.9% | 3 | 6.7% | 114 | 9.8% |
| Mobile healthcare | 82 | 7.7% | 4 | 7.5% | 2 | 4.4% | 88 | 7.5% |
| Cosmetic and plastic surgery centers | 56 | 5.2% | 5 | 9.4% | 26 | 57.8% | 87 | 7.5% |
| Pre-natal Services | 46 | 4.3% | 32 | 60.4% | 1 | 2.2% | 79 | 6.8% |
| Family Planning/ Reproductive Health and /wellness services | 58 | 5.4% | 9 | 17.0% | 0 | 0.0% | 67 | 5.7% |
| Nutritional Assistance | 63 | 5.9% | 2 | 3.8% | 0 | 0.0% | 65 | 5.6% |
| Vaccination of Infants, Children, and/ or Pregnant Women | 62 | 5.8% | 2 | 3.8% | 0 | 0.0 % | 64 | 5.5% |
| Medical fitness check-up | 45 | 4.2% | 1 | 1.9% | 5 | 11.1% | 51 | 4.4% |
| Medical Records including birth/ death records | 40 | 3.7% | 3 | 5.7% | 0 | 0.0% | 43 | 3.7% |
| Animal Health | 30 | 2.8% | 2 | 3.8% | 0 | 0.0% | 32 | 2.7% |

Source: Ajman Statistics Center

*Note: Multiple answers per respondent possible.

At the city level, Ajman City followed a pattern similar to the emirate overall, with financial aid for treatment (24.3%), basic dental/oral hygiene (23.1%), and ambulance and emergency services (17.2%) identified as the top three services requiring improvement. However, doctors

and medical services ranked higher in Ajman City than in the emirate overall, with 16.8 % noting it needs improvement.

In Manama, the strongest concern was secondary/tertiary healthcare (71.7%), This was followed by Pre-natal Services (60.4%), ambulance and emergency services, cited by 47.2 % of respondents. and home healthcare services (32.1%).

In Mafout, 57.8 % of respondents called for improvements in cosmetic and plastic surgery centers, far exceeding all other services in that area. Other notable mentions included basic dental/oral hygiene and medical fitness check-up.

While priorities varied by region, the findings highlight common areas for enhancement in healthcare provision across Ajman, especially regarding emergency response, financial support, and oral care services.

SUMMARY, DISCUSSION, AND IMPLICATIONS

Introduction

This chapter presents the discussion of results, implications and recommendations for future research. Results from the review of literature, quantitative exploration, are discussed in line with the research questions. Implications of study findings, limitations and recommendations on future studies were discussed.

Discussion

What is the resident's satisfaction level on availed healthcare services?

Study findings show that the overall satisfaction of Emirate of Ajman residents with healthcare services provided by government and private sectors reached 93.7%. The government healthcare sector reported an overall satisfaction rate of 92.0%, while the private healthcare sector reached approximately 95.1%. Six dimensions were used to evaluate residents' satisfaction with healthcare services.

The tangible dimension satisfaction reached 97.3%, with satisfaction rate observed in the private sector compared to the government. This dimension includes two elements: availability of equipment, supplies and medicine, and quality of healthcare facilities. For the government sector, the availability of equipment, supplies, and medicine had the highest influence, whereas for the private sector, the quality of healthcare facilities was the leading element.

The responsiveness dimension recorded 90.1% satisfaction. Similar to tangibles, satisfaction was higher in the private sector. Among the seven elements in this dimension, the geographical location of healthcare facilities was the most satisfying factor in the government sector, while access to avail healthcare services was the top-rated element in the private sector.

The reliability dimension showed an overall satisfaction rate of 95.1%, with 93.4% in the government sector and 96.5% in the private sector. All three elements cleanliness and sanitation of facilities, effectiveness of services, and health improvement after treatment had high satisfaction scores, all above 91.0% in both sectors.

The assurance dimension showed a satisfaction rate of 96.5%, with both sectors exhibiting high satisfaction across all three elements: competence and knowledge of healthcare staff, confidentiality, and safety and security of the healthcare delivery environment.

The empathy dimension had an overall satisfaction rate of 90.1%. The government sector reported slightly higher satisfaction than the private. Most elements under this dimension exceeded 90.0%, except for the cost of healthcare services, which had the lowest satisfaction score in both sectors.

Finally, the quality dimension, which includes quality of services, satisfaction with treatment, and comprehensive care recorded satisfaction levels exceeding 92.2 % in both government and private healthcare sectors.

Implications

A vast number of studies have examined satisfaction with healthcare services, with most researchers focusing on developing theoretical frameworks to assess service delivery and customer satisfaction. However, only a limited number of studies have addressed residents' satisfaction, particularly within the context of public and private healthcare sectors. This represents a significant gap in the literature, which this study seeks to address.

The current study provides empirical evidence on the relationship between healthcare service quality dimensions—such as tangibles, reliability, responsiveness, assurance, and empathy—and residents' satisfaction in the Emirate of Ajman. Unlike general customer satisfaction models, this research contributes to the understanding of how healthcare quality impacts actual residents in a government service context, providing a foundation for evidence-based policy and healthcare reform.

Moreover, the findings emphasize the importance of empathy as a consistently influential factor across both sectors, and reliability in the private sector, offering practical insights for healthcare managers and decision-makers to enhance service quality and better align healthcare offerings with residents' expectations.

THEORETICAL IMPLICATIONS

This study presents a theoretical framework to assess healthcare service quality and its influence on residents' satisfaction. The proposed model for Ajman resident satisfaction is structured around five core dimensions—tangibles, assurance, reliability, responsiveness, and empathy—along with service quality elements to evaluate the relationship between healthcare quality and residents' satisfaction.

A comprehensive approach was adopted, using households as the primary unit of data collection on satisfaction across multiple healthcare services in the Emirate of Ajman. This method enabled the linkage of satisfaction levels across more than one availed service, allowing deeper analysis of patterns and clusters within service use.

Although this approach demands greater effort in terms of design, implementation, and quality control, the value it adds by capturing multi-dimensional service experiences outweighs the

complexity. Compared to vertical models that assess each service in isolation, the integrated household-based model offers a more holistic understanding of satisfaction.

This model can serve as a reference for future research on healthcare service quality and satisfaction, both in Ajman and across other emirates. Other regions may replicate this model to monitor and improve residents' satisfaction levels based on locally delivered healthcare services.

Practical Implications

Healthcare services encompass a broad spectrum of needs. This study provides valuable insights to the local government of Ajman, enabling a better understanding of residents' perspectives regarding the current quality of healthcare services. By analyzing various factors influencing service delivery and their impact on residents' satisfaction, the findings serve as a guide for healthcare providers to deliver more effective, equitable, and resident-centered services. Every resident is entitled to equal access to quality healthcare. In recent years, global attention has primarily focused on combating non-communicable diseases such as cardiovascular conditions, cancer, diabetes, and others.

Simion (2017) emphasized that healthcare systems significantly influence a nation's economic growth through factors like GDP and life expectancy. The pandemic highlighted the fragility of healthcare infrastructures in many regions, leading to lockdowns, the closure of educational institutions and businesses, and disrupted services across sectors such as tourism, transportation, and education. This chain reaction illustrated how essential a strong healthcare system is for national stability.

The crisis also underscored the urgent need for resilient healthcare systems supported by adequate infrastructure, equipment, medication, and human resources. Countries around the world faced shortages and urgently required assistance. The experience has taught that healthcare is not only a social service but a national strategic priority.

Improving healthcare systems today will have long-lasting effects across all sectors. Investing in innovation, infrastructure, and human capacity will strengthen the healthcare sector's ability to meet future demands and contribute to building a healthy, resilient society. A well-developed healthcare system enhances public trust, supports national productivity, and ensures preparedness for future crises. Healthcare remains a fundamental and primary need for every society.

Recommendations, Limitation and Future Research

This study primarily focused on evaluating residents' satisfaction with healthcare services in the Emirate of Ajman. While most existing research emphasizes hospital-based or patient-level satisfaction, few studies consider community-wide resident satisfaction. The model employed in this study to assess satisfaction with healthcare services in Ajman proved to be effective for both government and private healthcare sectors. Therefore, the model may serve as a valuable framework for other local governments seeking to understand and monitor residents' satisfaction levels with healthcare services in their respective jurisdictions.

A comprehensive dataset was collected in this study, warranting further analysis—especially with regard to variations in satisfaction based on respondent characteristics. Deeper insight could be gained by examining specific segments of the population who expressed either satisfaction or dissatisfaction across the different service dimensions.

The current analysis grouped all respondents together, including both UAE nationals and non-UAE nationals. However, analyzing these groups separately in future studies could offer a more nuanced understanding of the diverse healthcare needs of Ajman's population. Furthermore, the study included only those who had availed healthcare services. Future research should also explore the challenges faced by residents in accessing services, as well as how socio-demographic factors relate to satisfaction outcomes.

Given the importance of healthcare as a basic human need and the ongoing evolution of healthcare expectations, continuous updates to healthcare service provisions are vital to meet emerging community needs. Based on the study findings, the following recommendations are made:

1. A study should be conducted to evaluate the effectiveness of telehealth care services in delivering appropriate treatment while ensuring diagnostic and prescription accuracy.
2. The local government, in collaboration with the Ministry of Health and Prevention (MOHAP), may consider establishing specialized facilities for patients with communicable diseases. This will help contain the spread of infections and ensure dedicated care for chronic and vulnerable patients.
3. The cost of healthcare services was found to be a point of dissatisfaction, especially in the private sector. Although services under MOHAP are generally more affordable, oversight from a dedicated authority is essential to monitor cost-effectiveness and enhance transparency.

References

Al-Neyadi, H. S., Abdallah, S., & Malik, M. (2018). Measuring patient's satisfaction of healthcare services in the UAE hospitals: Using SERVQUAL. *International Journal of Healthcare Management*, 11(2), 96-105. Sci-Hub | Measuring patient's satisfaction of healthcare services in the UAE hospitals: Using SERVQUAL. *International Journal of Healthcare Management*, 11(2), 96-105

Coțiu, M. A. (2014). Consumer Satisfaction in the Healthcare Sector. A Critical Review of Some Empirical Studies. *International Journal of Economic Practices and Theories*, 4(2), 168-178. (PDF) Consumer Satisfaction in the Healthcare Sector. A Critical Review of Some Empirical Studies (researchgate.net)

DPE Research Department. 2016 August. The US healthcare system: an international perspective. Department for Professional Employees, Fact Sheet 2016, 1-15. The U.S. Health Care System: An International Perspective — Department for Professional Employees, AFL-CIO (dpeafcio.org)

Habidin, N.F., Ali, N., Janudin, S.E., Salleh, M. I., Latip, N.A., Azman, M.N. (2015). A review of service quality improvement and organizational performance in healthcare industry. *International Journal of Pharmaceutical Sciences Review and Research*, 35(2), 144-150. (PDF) A Review of Service Quality Improvement and Organizational Performance in Healthcare Industry (researchgate.net)

Home Mobile Healthcare. United Arab Emirates: Ministry of Health & Prevention. Retrieved from <https://mohap.gov.ae/en/home>

Lee, D. (2017). HEALTHQUAL: a multi-item scale for assessing healthcare service quality. *Service Business*, 11(3), 491-516. (PDF) HEALTHQUAL: a multi-item scale for assessing healthcare service quality (researchgate.net)

Lee, D. H. & Kim, K. K. (2017). Assessing healthcare service quality: a comparative study of patient treatment type. *International Journal of Quality Innovation*, 3(1), 1-15. (PDF) Assessing healthcare service quality: a comparative study of patient treatment types (researchgate.net)

Miller, L.J & Lu, W. (2018, September 19). These are the economies with the most and least efficient healthcare. Bloomberg. <https://www.bloomberg.com/news/articles/2018-09-19/u-s-near-bottom-of-health-index-hong-kong-and-singapore-at-top>

Naidu, A. (2008). Factors affecting patient satisfaction and healthcare quality. *International Journal of Healthcare Quality Assurance*. 22(4), 366-381. (PDF) Factors affecting patient satisfaction and healthcare quality (researchgate.net)

Shabbir, A., Malik, S. A., & Janjua, S. Y. (2017). Equating the expected and perceived service quality: A comparison between public and private healthcare service providers. *International Journal of Quality & Reliability Management*, 34(8), 1295-1317. (PDF) Equating the expected and perceived service quality: A comparison between public and private healthcare service providers (researchgate.net)

Sharifi, M., Mohammadi, F., Ramezani, M., Vardanjani, E., & Ali, S. (2012). Patients perception and satisfaction of the ambulance service (115) at Shahrekord, Iran. *Life Science Journal-Acta Zhengzhou University Overseas Edition*, 9(4), 2196-2201. (PDF) Patients Perception and Satisfaction of the Ambulance Service (115) at Shahrekord, Iran (researchgate.net)

Thumbay, M. (2018). Why changes in the UAE healthcare sector are an economic boost for everyone. <https://www.entrepreneur.com/article/319076>

Ursulica, T. E. (2016). The relationship between healthcare needs and accessibility to healthcare services in Botosani County-Romania. *Procedia Environmental Sciences*, 32, 300-310. (PDF) The Relationship between Health Care Needs and Accessibility to Health Care Services in Botosani County- Romania (researchgate.net)

World Bank. 2016. The local governance performance index (LGPI) (English). Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/196591468197374514/The-local-governance-performance-index-LGPI>