



# ASSESSING SERVICE QUALITY GAP OF PRIVATE HEALTH CARE SECTOR: A FOCUSED STUDY IN MUSCAT

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## ABSTRACT

In any country, hospitals play an imperative role in the health care system. The service quality in the hospital plays an important role in determining its success. There are many factors that affect the service quality of the private hospitals. SERVQUAL model help to measure the service quality in term of reliability, tangibility, assurance, responsiveness and empathy. Service quality gap is the comparison between customer expectation and customer perception. Delivering suitable service quality plays an important role in all service industries in particular to health care sector. Hence, the author felt that in such a situation there was a strong case for carrying out the current research to understand the service quality Gap. This main objective of this research is to examine the service gap between customer expectation and perception using SERVQUAL model among customers of private health care institutions. This research is carried out by using Gap analysis scoring technique. The survey is based on questionnaire and the respondents for this study were selected by using multiphase sampling technique (also called as double sampling) that includes lottery, cluster, and convenience sampling method. This study found that there is a gap between customer expectation and perception on service quality in private hospitals that resulted in the level of customers' satisfaction. Henceforth, private hospital administrators should focus on the grey areas in the SERVQUAL gap to develop their SERVQUAL in order to offer high quality services to meet customer satisfaction.

## KeyWords

Assurance, Empathy, Health Sector, Reliability, Responsiveness, Service Quality; SERVEQUAL, Tangibles

## 1. INTRODUCTION

SERVICE sector plays an important role in the economic growth of any country. Providing service to customers to meet their needs and expectations is one of the most important aspect in order to make customers happy and satisfied, and this will lead to the success of the sector. According to (Kotler et al., 2000), the success of service sector is depending on, how much they understand about the service gap between customer expectation and perception. It's one of the most important indices needed to be understood by service industries. Researchers and marketing strategists have used different tools to measure the service gap between customer expectation and perception. SERVQUAL model is a widely used tool to study the service gap.

The SERVQUAL questionnaire was first published in 1985 by a team of academic researchers, Parasuraman, et.al., to measure quality in the service sector, (Kang & James, 2004) stated that SERVQUAL is more of service-oriented than product-oriented due to the absence of tangibility. The model is based on meeting the gap between the expected service of customers and the actual provided service by an organization. SERVQUAL model helps in the measurement of service quality level and it is used in many different services business areas such as banks, restaurants, hospitals, and hotels to provide quality service. In the past, SERVQUAL used to have 10 dimensions (competence, reliability, communication, credibility, tangibles, security, responsiveness, access, courtesy and understanding the consumer) but had been reduced to half (reliability, assurance, tangibles, empathy, and responsiveness [RATER]). Understanding the service gap is important for private health care institution, due to building the reputation of the institution in a short term as it's profitable for a business industry. Using SERVQUAL model help to measure the service quality in term of reliability, tangibility, assurance, responsiveness and empathy. The SERVQUAL model can be estimate on customer expectation in delivering the service as well the performance after receiving the service. (Kang & James, 2004) stated that SERVQUAL is more of service-oriented

than product-oriented due to the absence of tangibility. The model is based on meeting the gap between the expected service of customers and the actual provided service by an organization.

## 2. LITERATURE REVIEW

### 2.1 Service quality

In service industry, quality is the major advantage that differentiates companies within the industry and helps in strategy development and success (Saravanan & Rao, 2007, p. 437), where they focus on providing high level of services to meet customer expectations and requirements. The usage of SERVQUAL approach has rapidly increased and dismissed using the traditional method of perception measurement after identifying the needs and importance of quality service to be differentiated from product quality and its traditional way. SERVQUAL approach predicts the gap between customer satisfaction and the actual provided service and the model consist of reliability, assurance, tangibles, empathy, and responsiveness (RATER) to achieve service quality (Dabholkar et al., 2000), where it is hard to measure and asses the level of quality compared to tangible good due to the absence of tangibility and homogeneous. As (Jiang, L. Jun, M. and Yang, Z., 2016) identified each dimension as following, (tangible) existence of physical equipment, personal, and features, (reliability) ability of performing service in accurate and consistent manner, (responsiveness) employees providing quick service to customers and willingness to help. Each dimension is an important variable used to measure the quality of services, (assurance) employee's courtesy and knowledge, and their ability of confidence and trust, (empathy) involves employees' efforts of knowing customers and their needs. Tangibility are the physical facilities and equipment and included in several studies to assess the quality of the service for the impact of tangible property and it often makes it difficult for customers to understand the quality of the tangible service so it is difficult for companies to understand customers and evaluate the service and that the perception depends on the physical machine and price instead of the basic service. And this physical evidence means the environment that provides the service. Thus, the company and the customer interact to make it easier to perform the tangible service (Zeithaml VA & Bitner MJ, 2000).

According to (Marshall G & Murdoch I, 2001), Reliability is the ability to perform the promised service reliably and has many external and internal forms where it must be more accurate and reliable. According to (Dewi, F.D, Sudjana, G, and Oesman Y.M, 2011), Responsiveness is the ability of the staff within an organization to deliver fast service, correct and positive reaction, and helping customers, all in the right time and place. In addition, it is the ability of employees to confirm the dates of delivery to customer requests quickly and effectively in a timely manner to meet their requests. Assurance, as identified by (Marshall G, Murdoch I., 2001), it is Employees knowledge, and ability to encourage confidence and trust to customers. It is a method to persuade the provider to transfer the confidence from one to another through efficiency of the provider and the last service quality variable is Empathy as (Ickes W, Gesn P. R., & Graham T, 2000) said, its giving personal attention to customers, Where The individual interest of the customer is given and there are features of sympathy that affect each customer, and therefore there are emotional motives towards customers, and there must be a link between sympathy for attention and attention through emotional words as they affect clients.

### 2.2 Service quality gap

Service quality gap is the comparison between customer expectation and customer perception (Juga et al., 2010). Delivering suitable service quality plays an important role in all service industries. To achieve customer expectations, the health care institution should provide appropriate products and services to their customer by developing proper strategic plan. Moreover, using customer's feedbacks in this organizations is important in order to measure their customer expectations as well their satisfaction level. This will help the private health care industry to compete in their services in local and international markets (AlRousan & Mohamed, 2010). The service quality gap studies it's for evaluating the difference between customer expectation before the service and customer perception after the service. Furthermore, the factors of service quality gap model recognized from the differences between expectation and actual perception. There are many factors which is reliability, tangibility, assurance, responsiveness and empathy (Udo et al., 2010).

In the recent journals and articles, some of the authors support their orientations and identified factors of service quality in the service industries (Zeithaml, Bitner & Gremler, 2012). Also, the literature review mentioned the differences of the 5 gaps. The first gap is between customer expectations and management performance of those expectations. The second gap is between management performance of customers' expectations and service quality requirement. The third gap is between service quality specification and service delivery. The fourth gap is between service delivery and external communications to customer about service derive. The final gap is between customers' expectation and perceived. Each gap has to be filled-in and covered by organizations providing services to their customers in order to deliver services as expected by them. The researchers have identified a significant absence of researches related to health care institutions and service quality in GCC countries. This research can be beneficial to the service industry within GCC countries that has more similar culture, values, and environment compared to other countries, and specific identification of SERVQUAL dimensions and its usage in private health care institutions.

## 3. STATEMENT OF THE PROBLEM

It is presumed that the private hospitals pay special care for the customers. As the health care service is an important one, the customers have to investigate doing a treatment or traveling abroad is a good option for them. According to the treatment is provided in Oman, especially in Muscat, which helped the researchers to study the service gap between customer expectation and perception in health care services. Moreover, medical treatment is provided outside the country people spend huge money on medical treatment.

In order to reach customer satisfaction, the researchers intended to discover the customer needs, wants and perceptions. The quality of service in a private hospital before undergoing any treatment which would help them in decision making. Henceforth, this research conducted to find out how the customer gets treated in private hospitals and the received treatment in Muscat. Customers do places different expectations from the service providers. If they are capable of meeting the expectations of customers, they could succeed in their business. Since providing quality service is an essential factor that determines the fate of the business the service provider also gives significant importance to it. It is noticed that some people go abroad for medical treatment. Therefore, studying the quality of service among the private hospital in Muscat would be helpful for the customers. In this, an attempt is made to understand the customer expectation of services quality factors using SERVQUAL model and the perceived level on such factors was explored.

#### 4. RESEARCH QUESTIONS

Based on the above problem statement the following research question were raised.

Is there any difference between customer expectation and perception on service quality of private health care institutions?

#### 5. OBJECTIVE OF THE STUDY

The Objective of the study is:

To measure the service gap between customer expectation and perception using SERVQUAL model among customers of private health care institutions.

#### 6. HYPOTHESIS

H<sub>0</sub>: There is no significant gap between customer expectation and customer perception on service quality.

H<sub>a</sub>: There is significant gap between customer expectation and customer perception on service quality.

#### 7. METHODOLOGY

The researchers used descriptive research design to describe the process of private hospitals in delivering the quality of services to achieve customer satisfaction. The current research is predominately based on primary data. The target respondents for this study were patients who were visited to private hospitals. As it is practically not possible to get the details of all customers, based on the availability of time and cost consideration in carrying out this research work, it is decided to collect the required information from 135 respondents. In this research multiphase sampling technique is adopted to choose sample respondents and it is also known as double sampling. According to (Acharya, A.S., 2013) multiphase sampling is an intricate form of clustering used for different groups to have equal chance of being selected in each subgroup. This method of multiphase sampling is frequently adopted to reduce non-response and increase accuracy. The sampling technique consists of two phases. The first phase has two steps, step one is division of the six areas within Muscat governorate (Muscat, Mutrah, Bawshar, Al Seeb, Qurayyat, and Al Amirat) by adopting Lottery sampling method, where every individuals has an equal opportunity to be selected within the sample collected from the population (Acharya, A.S., 2013), eventually the selection was randomly decided upon Bawsher area. Step two was the process of clustering the type of health institutions within Bawsher area into private clinics, polyclinics, and hospitals, where we chose private hospitals within the different clusters to be our sample conveniently. Its convenience for the patient too, because we are not going to distribute the questionnaire in emergency department but in other departments that will be more convenience and appropriate time for them to responded. In the second phase non-probability sampling is used in selecting the respondents.

To collect the response, the researchers distributed the structured questionnaire to the respondents in private health care institutions. This questionnaire consists of respondent's profile such as gender, age, income and nationality. Based on the reviews the statements in the questionnaire were framed under the five dimensions of service quality. To assess the extent of customers' opinion all the items in the questionnaire were assessed using Likert's 5-point scaling technique. Cronbach's Alpha reliability test was done to ensure internal consistency of the instrument. The overall (38 statements) alpha value was .940 which proved that the instrument is highly reliable. The reliability statistics presented in Table 1.

TABLE 1  
 RELIABILITY STATISTICS TEST

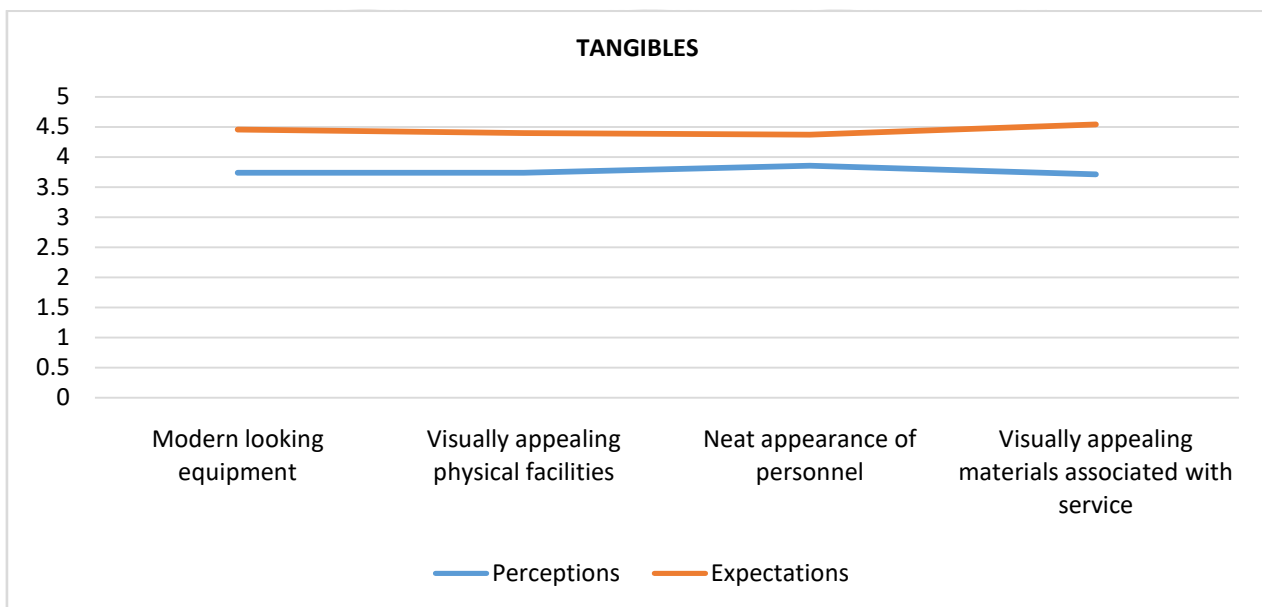
| Variable                    | N of Statements | Cronbach's Alpha |
|-----------------------------|-----------------|------------------|
| Service Quality Expectation | 19              | .957             |
| Service Quality Perception  | 19              | .922             |
| Composite                   | 38              | .940             |

**8. RESULTS AND DISCUSSION**

Gap score analysis method were applied to analyse the expectation and perceptions of service quality under the five service quality dimensions.

**TABLE 2**  
**GAPS IN TANGIBLES**

| <b>Dimensions</b>                       | <b>Factors</b>                                       | <b>Perceptions</b> | <b>Expectations</b> | <b>Gap Score</b>  |
|---|--|--------------------|---------------------|-------------------|
| <b>Tangibles</b>                        | Modern looking equipment                             | 3.7428             | 4.4571              | -0.7143           |
|   | Visually appealing physical facilities               | 3.7428             | 4.4                 | -0.6572           |
|   | Neat appearance of personnel                         | 3.8571             | 4.3714              | -0.5143           |
|   | Visually appealing materials associated with service | 3.7142             | 4.54285             | -0.82865          |
| <b>Average Tangibles SERVQUAL Score</b> |  |                    |                     | <b>-0.6786125</b> |



**FIGURE 1. GAPS IN TANGIBLES**

From the table 2 of tangibility gap score analysis, it is evident that the majority of respondents expect more from the private hospital in term of the overall appearance and neat. This is evident from the negative gap score average of tangibles by -0.6786125 showing the difference between expectations and perceptions. Among the four factors associated to tangibles respondents' expectations is very high on the visually appealing materials associated with service as the mean score is 4.54285.

TABLE 3  
 GAPS IN RELIABILITY

| Dimensions         | Factors                                       | Perceptions | Expectations | Gap Score       |
|--------------------|---|-------------|--------------|-----------------|
|                    | Keep up Promise of Performing at Certain Time | 3.7428      | 4.11428      | -0.37148        |
|                    | Sincere Interest in Solving Patients Problem  | 3.8         | 4.2571       | -0.4571         |
| <b>Reliability</b> | Time Not Busy to Respond                      | 3.5142      | 4.45714      | -0.94294        |
|                    | Provide Service at the Promised Time          | 3.9428      | 4.6          | -0.6572         |
|                    | <b>Average Reliability SERVQUAL Score</b>     |             |              | <b>-0.60718</b> |

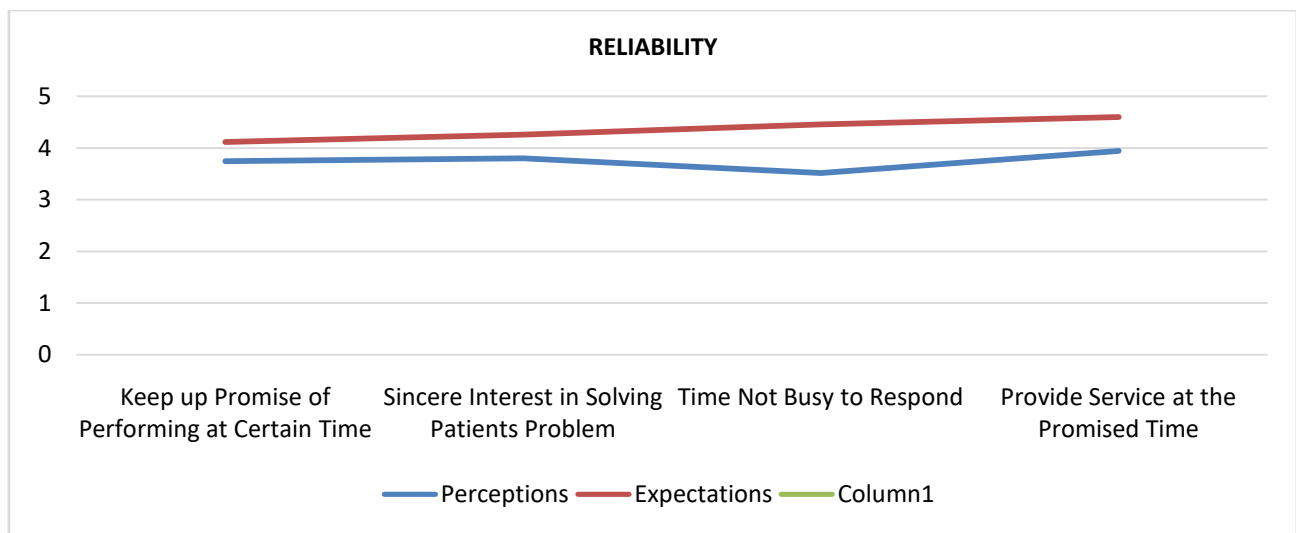


FIGURE 2. GAPS IN RELIABILITY

The reliability Gap analysis table 3 shows that the majority of respondents they have a higher expectation that hospital will do their promises in a good manner. This is evident from the negative gap score average of reliability by -0.6786125 showing the difference between expectations and perceptions. In reliability factors the highest expectation mean score (4.45715) could be seen in time to respond. On the other hand, perception mean score is less (3.5142) for the same.

TABLE 4  
 GAPS IN RESPONSIVENESS

| Dimensions            | Factors   | Perceptions | Expectations | Gap Score       |
|-----------------------|---|-------------|--------------|-----------------|
|                       | Error Free Records                              | 3.6571      | 4.11428      | -0.45718        |
|                       | Inform exactly about the Performance of Service | 3.6         | 4.25714      | -0.65714        |
| <b>Responsiveness</b> | Prompt Service                                  | 3.6571      | 4.45714      | -0.80004        |
|                       | Willingness to Help                             | 3.9714      | 4.6          | -0.6286         |
|                       | <b>Average Responsiveness SERVQUAL Score</b>    |             |              | <b>-0.63574</b> |

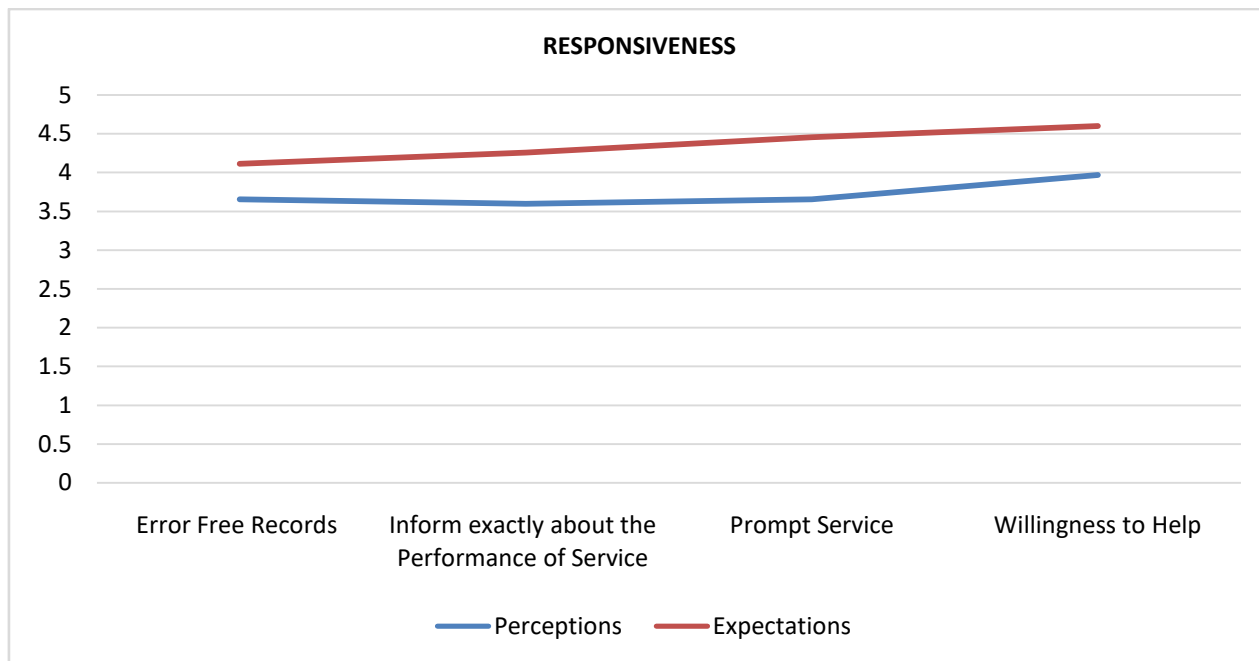


FIGURE 3. GAPS IN RESPONSIVENESS

It is apparent from the Table 4 of gap score analysis related to responsiveness, the respondents expect good responsiveness from private hospital. The total average gap between expectation and perception is -0.63574. Among the four factors associated to responsiveness respondents' expectations is very high on willingness to help as the mean score is 4.6.

TABLE 5  
 GAPS IN ASSURANCE

| Dimensions                              | Factors                    | Perceptions | Expectations | Gap Score |
|---|----------------------------|-------------|--------------|-----------|
| <b>Assurance</b>                        | Trustworthy                | 3.9714      | 4.51428      | -0.54288  |
|   | Safe in Dealings           | 3.9714      | 4.42857      | -0.45717  |
|   | Courteousness of Personnel | 3.9428      | 4.48571      | -0.54291  |
|   | Knowledge of Personnel     | 3.9714      | 4.45714      | -0.48574  |
| <b>Average Assurance SERVQUAL Score</b> |                            |             |              | -0.50718  |

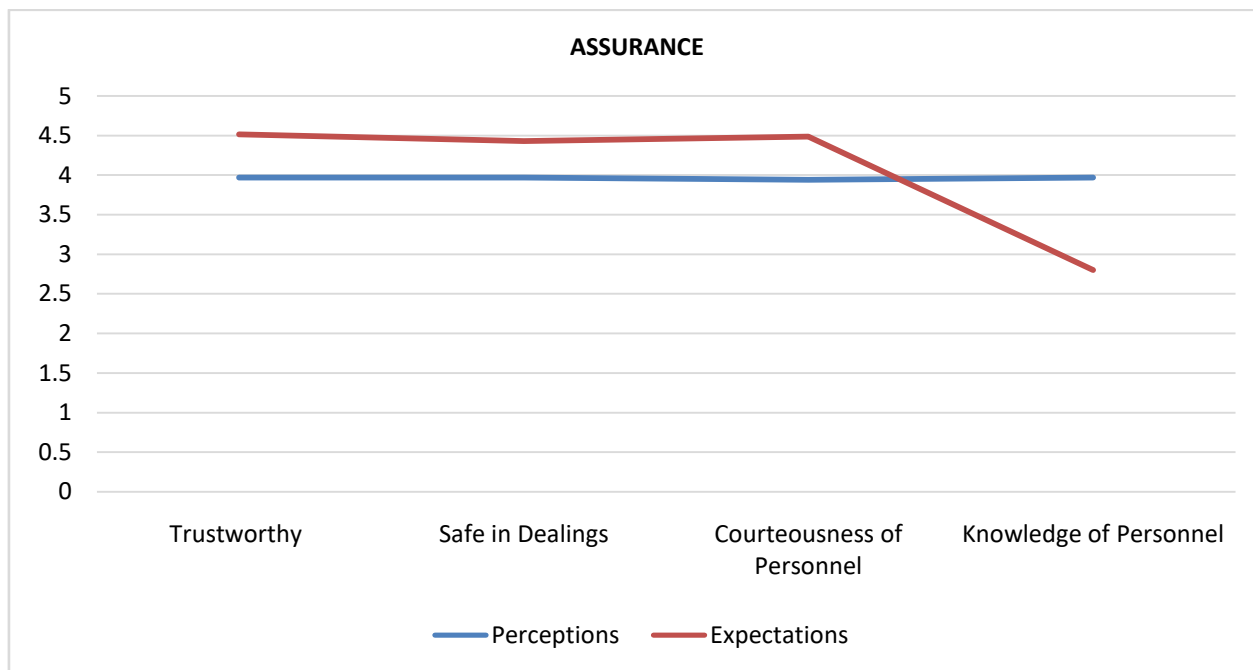


FIGURE 4. GAPS IN ASSURANCE

It is clearly shown from the table 5 of assurance, that expectation of respondents in meeting personnel knowledgeable and safe in dealing with is high and the average of gap score is lower (-0.50718), that means, the level of service the respondents receive is lower than what they expect. In assurance factors the highest expectation mean score (4.51428) could be seen in trustworthy. On the other hand, perception mean score is less (3.9428) for courteousness of personnel.

TABLE 6  
GAPS IN EMPATHY

| Dimensions                            | Factors                 | Perceptions | Expectations | Gap Score       |
|---------------------------------------|-------------------------|-------------|--------------|-----------------|
| <b>Empathy</b>                        | Individual Attention    | 3.9428      | 4.58823      | -0.64543        |
|                                       | Best Interests at Heart | 3.8571      | 4.4285       | -0.5714         |
|                                       | Understanding the Needs | 3.9142      | 4.54285      | -0.62865        |
| <b>Average Empathy SERVQUAL Score</b> |                         |             |              | <b>-0.61516</b> |

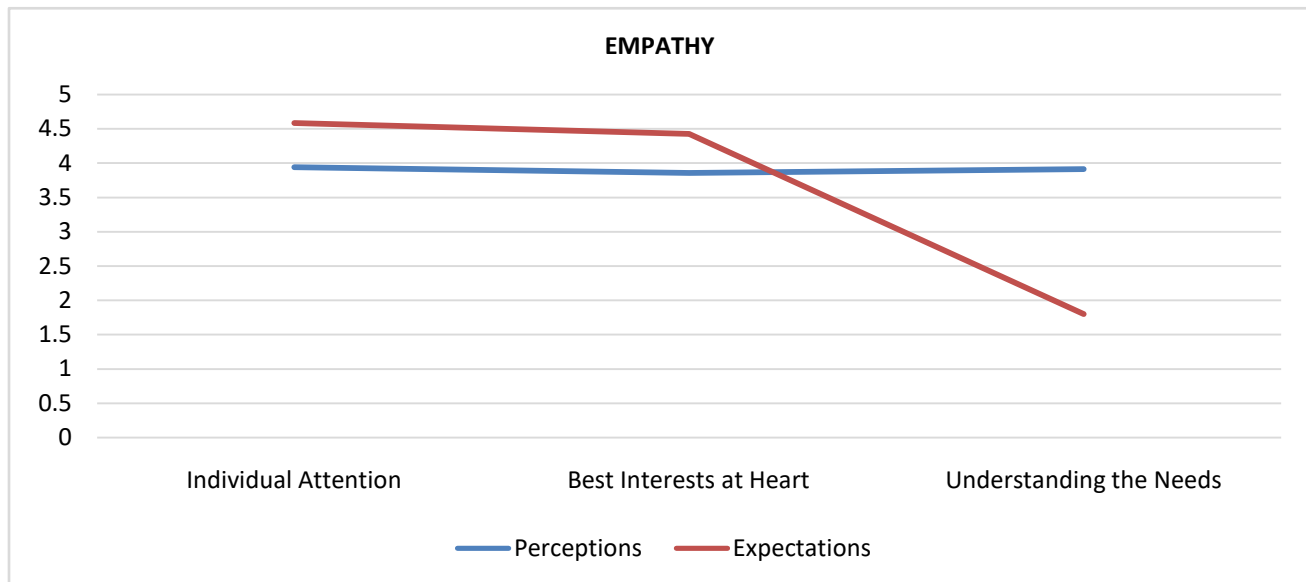


FIGURE 5. GAPS IN EMPATHY

It is obvious from the Table 6 of Empathy that the respondents expect individual attention provided by private hospital. The average score is (-0.61516) as there is difference between expectation and perception. There are three factors associated with Empathy out which individual attention have high expectation mean (4.58823) score and also the same have high perception mean score (3.9428).

**9. CONCLUSION**

Hospitals are health care institutions that have a coordinated clinical and other qualified staff to deliver medical, nursing, radiology, lab and related administrations consistently and constantly. Patient satisfaction relies upon numerous angle such as quality of medical services provided, accessibility of medications in pharmacy, behaviour of doctors, nurses and different staffs, and the nature of medical services administrations decides sensibly valued sorts of therapies with least results of drugs that fix the medical issue of patients. But hospitals present numerous difficulties due to the service quality expectations and perceptions of the patients. As private hospitals are numerous in Muscat, understanding what customer receive from private hospital is an important thing to measure their level of satisfaction in this region. In view of this phenomenon, the current paper seeks to answer the research question. From the aforesaid results it is clear that in all the five dimensions of service quality there are some gaps between the service quality expectation and service quality perception among the respondents. In particular, it is obviously noted that high level service quality gap



found in tangibles dimension (-0.6786125) and then it follows by responsiveness (-0.63574).

This research throws considerable light on all the five important dimensions in the service quality in the private hospitals. Therefore, the private hospitals could focus the grey areas which affect the service quality. Through this research, the researchers would like to offer some suggestion to improve the service quality viz., using modern equipment and technologies while treating patients to improve the tangibility dimension, providing more professional training to their staff in order to enhance their ability to deliver the promised services to patients, providing a higher level of willingness in helping patients and deliver high quality services as it significantly influences responsiveness dimension of service quality, In terms of assurance, workers need to help and involve more with services offering to help the patients and to provide personal attention to their patients by making each patient feel special and valuable. These suggestions could help for the private hospital administrators to develop their SERVQUAL in order to offer high quality services to meet customer satisfaction.

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