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# Understanding service quality and patient satisfaction in private medical practice: A case study

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Understanding customers' views on service quality is critical for any service provider interested in ensuring that they are being responsive to clients. Patients' service quality perceptions are however often given little or no attention in health service quality improvement programs. In this study data was collected from 220 patients of a private medical practice. The focus was on patients' service quality perceptions and how these relate to overall satisfaction as well as future behavioural intentions. The findings show that patients' perceptions on service quality play a significant role in determining their overall satisfaction with a service provider and that patients' overall satisfaction is critical in determining their future positive behavioural intentions towards a service provider. The implications of the findings are that there is need for patients' voice to start playing a greater role in the design and evaluation of health care service improvement programs more so in private medical practices.

Key words: Service quality, patients' perceptions, health services, private medical practice, patient satisfaction.

# INTRODUCTION

Quality in health care has been an issue of major concern to health professionals for a long time. One of the notable early advocates of quality in health care was Florence Nightingale, who in the nineteenth century advocated the use of statistics to help understand and improve health care quality. She strongly believed that hospital operations should be driven by patients' interest and argued for process improvements on the basis of empirical data (Meyer and Bishop, 2007).

While patient interests are a fundamental part of service quality in modern health care systems, Grol et al. (2000) noted that care providers often react to patients on the basis of their own subjective perceptions of patients' needs and experiences that often prove to be wrong. Alaloola and Albedaiwi (2008) observed that traditionally, managing service quality in health care entails such activities as checking providers credentials if they are qualified or not to provide the services; auditing clinical activities for the purposes of checking if clinical guidelines and protocols are being followed; auditing medical records as well as measuring outcomes in terms of whether the patients get better or not. The primary focus tends to be to protect patients from substandard care. The major problem however with the traditional way of managing quality in health services lies in its heavy reliance on technical clinical criteria and the absence of 'customers view' on the services provided.

Wilson et al. (2008) noted that understanding customers' views on service quality is critical for any service provider interested in ensuring that they are being responsive to clients. According to Musalem and Joshi (2009) being responsive to customers is a must for any business entity interested in being competitive in a market place. In health care services, customer perceptions of service quality are of special importance to service providers in private practice. This is due to the fact that customers of private medical practices, unlike those using public services, often have a wider choice of competing providers from whom to choose. Ensuring good service quality as perceived by customers can help a private practice effectively differentiate itself from competitors and thus giving it a competitive advantage over others. Lamb et al. (2008) noted that service quality is considered the most effective way a firm can differentiate itself from competitors.

# Problem statement and research objectives

Karassavidou et al. (2009) and Grol et al. (2000) observed

that patients have important insights about care provision that care providers cannot assume. This creates the need to involve patients in measures aimed at understanding or improving quality of care provided by any health care service provider. A review of literature however shows that there is a general lack of empirical research in the field of service quality and customer satisfaction with health services particularly in developing countries. Most of what is written on the subject is based on studies undertaken in developed countries. Such studies while useful have limited application in developing countries where the healthcare system and service levels are very much different. This study aims at contributing to literature on service quality and customer satisfaction with private health care services using a sample of private general practice patients in Johannesburg, South Africa. The specific objectives on the study are to (a) examine the relationship between service quality perceptions and patients' overall satisfaction as well as positive behavioural intentions towards a service provider (b) investigate if there is a relationship between patients overall satisfaction and severity of illness (c) to assess the power of each of the service quality dimensions to predict overall patient satisfaction and (d) make recommendations on measures that can be taken by those in private medical practice to ensure patient satisfaction.

# LITERATURE REVIEW

# Service quality

Naidu (2009) and Andaleeb (2001) observed that assessment of service quality in health services poses some interesting challenges that have engaged academics and practitioners for some time. The challenges relate to two major concerns namely, who will assess quality and on what criteria? Historically, the establishment of quality standards was delegated to the medical profession. This resulted in guality being defined primarily in terms of technical delivery of care which often lacked an understanding of customers' views on quality of care (Alaloola and Albedaiwi, 2008). Rashid and Jusoff (2009) noted that technical quality in health care services is defined primarily on the basis of technical accuracy of diagnoses or procedures as well as on compliance with professional specifications. They further noted that technical quality is mainly a function of competence of the personnel providing the service.

Literature from developed countries emphasises the importance of the patients' perspective in assessing health care service quality. However patients as customers of health care services often find themselves in a peculiar situation when it comes to assessing services quality as they are often not sufficiently qualified to assess all aspects of service quality particularly the technical aspects. Despite their limited knowledge, Wysong and Driver (2009) observed that patients form perceptions on both the technical and nontechnical aspects of health service delivery and these influence satisfaction with services offered. They noted that patients may use such cues as thoroughness of an examination, ability to perform procedures such as drawing of blood samples and getting intravenous devices right the first time, in their assessment of competence.

While some may still argue that patients cannot really be considered good judges of quality others think this does not matter. Andaleeb (2001) noted that it is not important whether the patient is wrong or right, what is important is how the patient felt. He argued that patients' inputs however subjective should at least help service providers understand and establish acceptable standards of service. This view is in line with the 'marketing concept' which emphasises on the need to ensure customer satisfaction. Using the marketing concept Bitner and Hubbert (1994) defined service quality as the overall impression or appraisal by customers of the relative inferiority or superiority of an organisation and its services.

# **Customer satisfaction**

Lovelock and Wirtz (2007) defined satisfaction as an attitude-like evaluation that occurs after an acquisition or a consumer interaction. The distinction between service quality and satisfaction is not always clear from literature. Badri et al. (2009) as well as Elleuch (2008) noted that there is a strong link between customer satisfaction and service quality to the extent that some studies depict service quality perceptions as satisfaction outcomes. In such studies, the same items used to measure service quality are used to compute satisfaction. Other studies on the other hand regard service quality and customer satisfaction as separate constructs and use different items to measure them. Examples of such studies include those by Andaleeb (2001), Bigne et al. (2003), Choi et al. (2005) and Elleuch (2008). Elleuch (2008) as well as Wilson et al. (2008) noted that service quality is fundamentally different from satisfaction in terms of underlying causes and outcomes and that satisfaction is a broader concept than service quality.

According to Wilson et al. (2008) service quality is one of the factors that affect satisfaction. They further noted that apart from service quality, there are other factors such as customer emotions that may affect customer satisfaction. Brink and Berndt, (2004) observed that if a customer is under stress, frustrated or angry, these negative emotions carry over to their response to a service provided. Investigations into the extent to which patient's health status affects satisfaction have however produced inconsistent results. Studies by Cohen (1996) as well as Sixma et al. (1998) found that poor physical health is associated with dissatisfaction. Badri et al. (2009) found a positive relationship between health status and satisfaction. On the other hand studies by Bertakis et al. (1991) as well as Esteban et al. (1994) found that health status is not significantly related to satisfaction.

In trying to the understand customer satisfaction, it is also important to differentiate between satisfaction associated with transaction specific encounters and overall cumulative satisfaction based on experiences over time. Bitner and Hubbert (1994) noted that transaction specific satisfaction does not always correlate with customers' cumulative satisfaction. It is however important to note that transaction specific encounters are building blocks and can modify cumulative satisfaction (Wilson et al. 2008). This study looks at customer satisfaction as a separate construct from service quality. In this investigation the interest is on overall cumulative satisfaction and not on satisfaction associated with a specific single encounter.

# Customer satisfaction and positive behavioural intentions

According to Elleuch (2008) researchers insist on the importance of satisfaction as a key predictor of customers intentional behaviours. Studies by Rowley, (2005), Choi et al. (2005), Bendall-Lyon and Powers (2004) found that satisfied customers are more likely to return to the same service provider, say good things about a service provider and recommend the service provider to others including family and friends. Wilson et al. (2008) observed that repeat patronage by satisfied customers has the additional benefit of helping in lowering organisational costs. They noted that costs associated with attracting new customers, the operating costs of setting up new accounts and time costs of getting to know the customer are all likely to be reduced if an organisation is able to retain its customers. Customer dissatisfaction on the other hand may result in unfavourable behavioural intentions such as less frequent visits, switching of providers and negative word-of-mouth (Ramsaran-Fowdar, 2008). Furthermore, in health services the decision to switch medical providers could damage customers' health in that it may lead to an interruption in, or non-compliance with, required treatment (Ovretveit, 2000). Seth et al. (2005) noted that many studies have also found a direct positive link between service quality and customer behavioural intentions. Based on the review of literature this study proposes the relationships in Figure 1.

In order to assess the relationships depicted in Figure 1, the following hypothesis were tested in the study:

H<sub>1a</sub>: There is a positive relationship between overall perceived service quality and patients' overall satisfaction with a private medical practice.

H1b: There is positive relationship between perceived service quality at each of the dimensional levels and patients' overall satisfaction with a medical practice.

H2: There is a positive relationship between patients' overall satisfaction and positive behavioural intentions. H3a: There is a positive relationship between overall perceived service quality and positive behavioural intentions towards a service provider.

H3b: There is positive relationship between perceived service quality at each of the dimensional levels and positive behavioural intentions towards a service provider H3c: Overall perceived service quality has less predictive power over positive behavioural intentions than overall patient satisfaction.

H4: There is a negative relationship between severity of illness and overall customer satisfaction.

# METHODOLOGY

Data used in the analysis was collected using a self-filling structured questionnaire administered on patients of a private general practice in Johannesburg, South Africa. A modified version of the SERVQUAL instrument was used to measure service quality. Developed by Parasuraman, Zeithaml and Berry in 1988, SERVQUAL is the most widely used instrument to measure service quality in literature (Elleuch, 2008; Kumar et al., 2009). Made up of 22 items grouped in five underlying dimensions, the scale has been used in a wide range of service industries including banking, health care and retailing and has been found to be highly reliable and valid (Elleuch, 2008; Kumar et al., 2009; Prayag, 2007). The five dimensions include:

- 1. Reliability: The ability to perform the promised service responsibly and accurately.
- 2. Assurance: The knowledge and courtesy of employees as well as their ability to inspire trust and confidence.
- 3. Responsiveness: The willingness of employees to help customers and provide prompt service.
- 4. Empathy: The provision of caring and individualised attention to customers.
- 5. Tangibles: The appearance of physical facilities, equipment and personnel.

The modifications to the scale were done for the purposes of ensuring that the items included in each dimension reflected the important service quality aspects for customers of health services. The developers of SERVQUAL pointed out that the scale can be adapted to fit the needs of a particular organization or industry (Parasuraman et al., 1988). The adaptations were made based on findings from a review of literature on service quality in health services as well as findings from in-depth interviews with 10 patients and 5 members of staff working at the private medical practice. The participants in the in-depth interviews were selected using convenience sampling. Diversity in age, gender and race were the main factors considered in the selection of participants. This was done to help capture any diversity of opinions that may be attributable to these factors.

The preliminary version of the questionnaire was pre-tested on 15 patients who had consulted at the medical practice. The pretesting was primarily aimed at making sure that questions were easily understood by respondents. The preliminary questionnaire was revised to take into account feedback received during pretesting. The final questionnaire was randomly distributed to patients



Figure 1. Service quality relationship model.

who had consulted at the medical practice during the data collection period. The patients were requested to fill the questionnaire before leaving the medical practice. Only patients 18 years and above were allowed to participate in the study. At the end of the data collection period, a total of 220 usable responses had been collected.

Version 1 of Statistical Package for Social Science (SPSS) was used to analyze the data. The main statistical tools used were descriptive statistics, correlation analysis and regression analysis.

Cronbach alpha coefficient was used to measure the reliability of the scales used in the study. All scales were found to have alpha coefficients of greater than 0.7. This showed that they were highly reliable (Hair et al., 2010).

# **RESULTS AND DISCUSSION**

Table 1 presents findings relating to patient's perceived service quality on (i) each of the 22 items (ii) each of the five dimensions; and (iii) overall perceived service quality. A seven point Likert scale with 1 ='very strongly disagree' and 7 ='very strongly agree' was used to measure each item relating to service quality perceptions. Perceptions on each of the five dimensions were calculated as a summated average of the items used under each dimension while overall perceived service quality was calculated as a summated average of all the 22 items.

According to the findings, patients in general perceived the service quality provided by the private medical practice under investigation to be high. This is deduced from the fact that overall perceived service quality value was 5.96. Furthermore, a look at the 22 service quality items individually shows that none had a mean value of less than 5. Items with the three highest mean values included the fact that staff treated customers with warm and caring attitude (6.20), staff appear neat and professional (6.17), and having visually appealing physical facilities e.g. waiting areas and consulting rooms (6.16). The three lowest mean values were on accurate billing of patients (5.69), maintenance of error free medical records of patients (5.72) and keeping patients informed of when the services will be performed (5.76). At dimensional level the highest perceived service quality was on tangibles (6.07) while the lowest was on reliability (5.83). It is important to note that two of the three items with the lowest mean lowest mean values were all from the reliability dimension. Although the mean values are not very low, having lower ratings on the reliability dimension is something service providers should avoid. This is mainly because in services marketing reliability is considered the most important service quality dimension of all the five (Wilson et al., 2008).

In order to test the hypothesised relationships between variables depicted in Figure 1, correlation analysis was performed. Note that 'positive behavioural intentions' was measured as a summated average of two items namely willingness to return and willingness to recommend. Overall satisfaction was also measured as a summated average to two items namely 'overall I am satisfied with the way I am treated at this medical practice' and 'overall I am satisfied with the services offered by this medical practice'. A seven point Likert scale with 1 = very strongly disagree' and 7 = 'very strongly agree' was used to measure items relating to both customer satisfaction and behavioural intentions. Severity of illness was measured by asking respondents to indicate whether they regarded their sickness as 1 = mild, 2 = moderate, 3 = fairly severe or 4 = severe. Table 3 presents results on the correlation analysis. In correlation analysis, the correlation coefficients are used

 Table 1. Perceived service quality – Descriptives

Dimension and Items	Mean	Std Dev.
Assurance	5.95	0.892
P1. Medical staff that instil confidence in patients	5.94	0.984
P2. Staff that are knowledgeable to answer patients questions	5.85	1.109
P3. Staff that are consistently courteous	5.90	1.025
P4. Patients made to feel safe in their interaction with staff i.e. that privacy is assured	6.10	1.011
Poliability	5.83	0 021
DE Droving convices at promised time	5.00	1 099
PS. Flowing services at promised time	5.90	0.095
PO. Stan that are dependable in handling patients	5.95	0.900
P7. Maintenance of ention free medical records of patients	5.72	1.203
Fo. Accurate binning of patients	5.69	1.200
Responsiveness	5.96	0.925
P9. Keeping patients informed of when the services will be performed	5.76	1.232
P10. Medical staff that provide prompt services to patients	5.95	1.078
P11. Staff that are always willing to help patients	6.13	0.996
P12. Staff that are never too busy to respond to patients requests	6.01	1.064
	0.04	0.040
Empathy	6.01	0.913
P13. Giving patients personal attention	5.93	1.147
P14. Staff that treat patients with warm and caring attitude	6.20	0.905
P15. The medical practice having patients best interest at heart	5.95	1.069
P16. Staff that are understanding towards patients feelings of discomfort	5.96	1.086
P17. Operating hours that are convenient to patients	6.00	1.180
Tangibles	6.07	0.797
P18. Up to date equipment	5.85	1.074
P19 Cleanliness and excellent hygiene standards	6.06	0.989
P20. Staff that appear neat and professional	6.17	0.903
P21 Visually appealing physical facilities e.g. waiting areas and consulting rooms	6 16	0.925
P22 Visually appealing materials e.g. posters and magazine	6 1 1	0.992
Overall Perceived Service Quality	5.96	0.801

to measure the strength of relationships. According to Field (2009) correlation coefficients of +-5 represent strong relationship.

The results according to Table 3 show that there are strong and statistically significant positive relationships between:

- 1. Overall perceived service quality and patients' overall satisfaction thus hypothesis H<sub>1a</sub> is hereby accepted.
- Perceived service quality at each of the dimensional levels and patients' overall satisfaction – thus H<sub>1b</sub> is hereby accepted.
- 3. Patients' overall satisfaction and positive behavioural intentions thus hypothesis H<sub>2</sub> is hereby accepted.
- 4. Overall perceived service quality and positive behavioural intentions towards a service provider thus hypothesis H3a is hereby accepted.

5. Perceived service quality at each of the dimensional levels and positive behavioural intentions towards a service provider – thus hypothesis H<sub>3b</sub> is hereby accepted.

These results mean that patients who perceive a private medical practice's service quality to be high are likely to be satisfied with the service provider in overall terms as well as have positive behavioural intentions towards the service provider.

No statistically significant relationship was however found between severity of illness and patient's overall satisfaction. This contradicts findings by Sixma et al. (1998), Cohen (1996) as well as Badri et al. (2009) who found significant associations between health status and satisfaction/dissatisfaction with service provider. The findings are however in line with those by Bertakis et al. Table 2. Correlation analysis.

		Overall Satisfaction	Willingness to Return	Willingness to Recommend	Positive Behavioural Intentions
Overall Perceived Service	Pearson Correlation	0.725**	0.682**	0.621**	0.673**
Quality	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	220	220	220	220
Assurance	Pearson Correlation	0.673**	0.641**	0.573**	0.628**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	220	220	220	220
Reliability	Pearson Correlation	0.596**	0.568**	0.514**	0.560**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	220	220	220	220
Responsiveness	Pearson Correlation	0.624**	0.580**	0.529**	0.573**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	220	220	220	220
Empathy	Pearson Correlation	0.735**	0.715**	0.648**	0.704**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	222	220	220	220
Tangibles	Pearson Correlation	0.634**	0.559**	0.527**	0.561**
	Sig. (2-tailed)	0.000	0.000	0.000	0.000
	Ν	220	220	220	220
Severity of Illness	Pearson Correlation	0.044			
	Sig. (2-tailed)	0.523			
	Ν	220			
Overall Satisfaction	Pearson Correlation	1	0.845** 0.841** 0.873**		0.873**
	Sig. (2-tailed)		0.000	0.000	0.000
	Ν	220	220	220	220

\*\*. Correlation is significant at the 0.01 level (2 – tailed).

(1991) as well as Esteban et al. (1994) who found that health status in not significantly related to satisfaction. From these results hypothesis H4 that there is a negative relationship between severity of illness and patient's overall satisfaction in hereby rejected.

After running the correlation analysis, a series of simple regression analysis were run in order to test the predictive power of perceived services quality on overall customer satisfaction and positive behavioural intentions as well as the predictive power of overall customer satisfaction on positive behavioural intentions. According to Field (2009) regression analysis is a way of predicting an outcome variable from the predictor variable(s). It should be noted that in assessing the predictive power of the five dimensions of service quality, simple regression and not multiple regression was used. This is because a preliminary correlation analysis of the service quality dimensions showed high levels of correlation between them. Field (2009) noted that when two or more of the independent variables are highly correlated the problem of multicollinearity comes in. He further noted that multicollinearity poses a problem in multiple regression as it makes it difficult to assess the individual importance of a predictor variable. In this study one of the objectives was to assess the power of each of the service quality dimensions to predict overall patient satisfaction. A series of simple regression analysis were thus run. According to Hair et al. (2010), simple regression equations can be denoted as:

### Y = b0 + b1X1

Where, Y = dependent variable,  $X_1 =$  independent variable 1,  $b_0$ = alpha coefficient (constant) and  $b_1$ = regression coefficient.

The results of the regression analysis are presented in Table 3. In the table, B represents that alpha and regression coefficients; SEB is the standard error of the coefficients;  $\beta$  is the standardized beta coefficient;  $R^2$  is the coefficient of determination. Also presented in the table are the t statistic and the significance level. According to the findings overall perceived service quality is a statistically significant predictor of both overall patient satisfaction and positive behavioural intentions. A closer leak at the appendix a statistic and the significant  $(P^2)$ 

look at the associated coefficients of determination (R<sup>2</sup>) however shows that overall perceived service

Table 3. Regression analysis.

Dependent variable: Overall satisfaction								
Model		В	SEB	β	t	Sig	R <sup>2</sup>	
	(Constant)	1.554	0.306		5.076			
1	Overall perceived service quality	0.791	0.051	0.725	15.541	0.000	0.523	
	(Constant)	2.352	0.295		7.964			
1	Perceived assurance	0.659	0.049	0.673	13.419	0.000	0.452	
	(Constant)	2.044	0.267		7.656			
1	Perceived empathy	0.704	0.044	0.735	16.006	0.000	0.540	
	(Constant)	2.052	0.351		5.847			
1	Perceived tangibles	0.695	0.057	0.634	12.120	0.000	0.403	
	(Constant)	2.755	0.302		9.137			
1	Perceived responsiveness	0.590	0.050	0.624	11.798	0.000	0.390	
	(Constant)	2.047	0.304		9.779			
1	Perceived reliability	0.716	0.052	0.596	10.948	0.000	0.355	
Depend	lent variable: Positive							
behavio	oural intentions							
	(Constant)	2.047	0.320		6.389			
1	Overall perceived service quality	0.716	0.053	0.673	13.446	0.000	0.453	
	(Constant)	0.982	0.204		4.813			
1	Overall satisfaction	0.851	0.032	0.873	26.407	0.000	0.762	
Depend	lent Variable: Willingness							
to retur	n							
	(Constant)	2.008	0.317		6.344			
1	Overall perceived service quality	0.724	0.053	0.682	13.768	0.000	0.465	
-	(Constant)	1.168	0.223		5.235			
1	Overall satisfaction	0.823	0.03	0.845	23.338	0.000	0.714	
Donone	lant Variabla, Willingnasa							
Dependent vandble: willingness								
10 1000	(Constant)	2 085	0.364		5 724			
1	Overall perceived convice quality	2.000	0.004	0 621	11 69/	0.000	0.395	
I	(Constant)	0.700	0.001	0.021	3 275	0.000	0.305	
1	Overall satisfaction	0.795	0.243	0 841	22 925	0.000	0 707	
1 1	(Constant) Overall perceived service quality (Constant) Overall satisfaction	2.085 0.708 0.795 0.879	0.364 0.061 0.243 0.038	0.621 0.841	5.724 11.684 3.275 22.925	0.000	0.385	

quality exerts h igher explanatory power on overall patient satisfaction ( $R^2 = .523$ ) than on positive behavioural intentions ( $R^2 = .453$ ). According to Hair et al. (2010) the coefficient of determination measures the proportion of the variance of the dependent variable about its mean that is explained by the predictor variable. The higher the value of  $R^2$ , the greater the explanatory power of the predictor variable. The results further show that overall patient satisfaction has higher explanatory power over positive behavioural intentions than overall perceived service quality ( $R^2 = 0.762$  vs. 0.453). From these findings hypothesis H<sub>3C</sub> that patients' overall satisfaction is a better predictor of

positive behavioural intentions than overall perceived service quality is hereby accepted.

Regression analysis was also run to assess the predictive power of each of the five dimensions of service quality on overall patient satisfaction. The results show that although there is a statistically significant relationship between overall patient satisfaction and each of the five dimensions of service quality, empathy has the highest predictive power of all  $(R^2 = 0.540)$ .

### CONCLUSIONS AND IMPLICATIONS

From the findings in this study it can be concluded that

service quality is a very important factor in ensuring patient overall satisfaction and positive behavioural intentions towards a medical practice. The results further show that although service quality perceptions are sometimes used in literature to denote customer satisfaction, the two constructs are different. The regression analysis results show that service quality helps to explain just over half of the variance in patients' overall satisfaction. This means that there are other factors apart from service quality that can also help contribute in explaining patients' overall satisfaction with a service provider. The results further show that service quality is able to explain less than half of the variance in positive behavioural intentions while patients' overall satisfaction is able to explain over three quarters of the variance in positive behavioural intentions. It can thus be concluded that patients overall satisfaction has more explanatory power over positive behavioural intentions than perceived service quality. Patients overall satisfaction is thus a good mediating variable between service quality perceptions and positive behavioural intentions.

An investigation of the relationship between severity of illness and patients overall satisfaction showed no statistically significant relationship between the two constructs. This is despite other studies findings a link between the two. While severity of illness cannot be totally dismissed as an important factor that can influence satisfaction, it is important to consider that this study involved a private medical practice with no admission facilities. The visiting patients are thus likely not to be the severely ill ones. One would expect severely ill patients to mostly consider health service providers with admission facilities. In such facilities severity of illness is likely to be a more important factor to bear in mind in assessing patient overall satisfaction aimed at identifying patients' expectations and assessing how well the practice may be doing on a variety of service quality dimensions with the aim of ensuring customer satisfaction.

The results of this study show that customer satisfaction is associated with willingness on the part of the patients to return to a service provider in future if need be as well as willingness to recommend a service provider to family and friends. These recommendations can easily help a practice increase its customer base and reduce its costs (especially marketing related costs). They further show that for a private medical practice to ensure patients overall satisfaction attention needs to be paid to all the five dimensions of service quality. While this is so, the findings showed that empathy had higher explanatory power on patient overall satisfaction. This shows that patients value empathetic behaviour on the part of health service providers. Service providers need to be aware that patients are sensitive to the impersonality with which services are sometimes delivered by disinterested and/or overworked professionals.

In a normal private medical practice it is not uncommon to find different types of employees including doctors, nurses, receptionists and accounts personnel. It is thus not enough to have a doctor that shows interest in his or her patients. Attention should also be given to how support staff at the practice is treating patients. It is thus important for private medical practitioners to ensure that all staff working in the practice has some basic customer service training.

### LIMITATIONS AND FUTURE RESEARCH

Despite having a large sample size, the generalisability of findings in this study may be limited by the fact that the sample was drawn from patients of a single private medical practice located in an urban setting. Future research can try to replicate the study by collecting data from more private medical practices and/or patients in different settings e.g. rural areas.

From the findings on the explanatory power of perceived service quality on overall patient satisfaction  $(R^2 = 0.523)$  it can also be concluded that although service quality is an important factor in influencing patient satisfaction, there are other factors that may contribute to enhancing overall customer satisfaction. Future studies can try to include more factors than service quality and severity of illness in their investigations.

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