




The significance of total quality management implementation challenges in service delivery



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Background: Many of the total quality management (TQM) implementation challenges substantiated in the literature seem oriented towards various facets, including organisation, management, or clients, casting doubts about the effectiveness of the concept in service delivery. The ever-increasing demand for quality services solicits more attention to the desired performance outcomes that define and reflect more of clients' needs. Such demand presents quality management concerns for many healthcare organisations targeting service delivery.

Aim: The TQM concept gets less logical given the increasing challenges in its implementation for service delivery. This research aimed to determine the significance of such challenges.

Setting: Queen 'Mamohato Memorial Hospital (QMMH), Lesotho.

Methods: Based on a questionnaire survey of 297 participants, comprising 98 staff and 199 clients, the study obtains survey data from a 5-year result of TQM implementation attempts at Queen 'Mamohato Memorial Hospital (QMMH), Lesotho.

Results: TQM demonstrates great potential to support service delivery as a strategic approach. The study isolates the management-oriented facet of TQM implementation challenges and finds them considerably influenced by the various TQM components.

Conclusion: This study establishes and classifies the TQM implementation challenges in QMMH, which are mostly organization, management, and client-oriented. It further addresses assumptions relating to their classifications. Overall, the result suggests that the significance of the underlying challenges in service delivery is more management-oriented.

Contribution: The study provides directions that strengthen the effectiveness of the TQM concept and its implementation. It suggests the capacity-building of a hospital's management team drives TQM implementation.

Keywords: total quality management; service delivery; service quality; service improvement; TQM implementation.

Introduction

As an all-encompassing approach to quality management, the enormous advantages that the concept of total quality management (TQM) promises, despite its implementation challenges, range from fostering efficiency and enhancing long-term success through customer satisfaction to improving organisational performance (Akinboade, Kinfaek & Mokwena, 2012). Many of the TQM implementation challenges substantiated in the literature seem to be oriented towards a variety of facets, including organisation, management or clients, thereby casting doubt about the effectiveness of the concept in service delivery. According to Khawka (2016), TQM denotes a comprehensive strategy of organisational and attitude change to enable personnel to learn and use quality methods to reduce costs and meet the requirements of clients. Thus, in line with Sharma and Gupta (2015), the TQM concept represents a comprehensive approach to organisational transformation that focusses on quality strategies to meet customers' expectations. This perspective follows various attempts to distinguish TQM from other approaches (Sadikoglu & Olcay 2014).

The ever-increasing demand for quality services solicits more attention to the desired performance outcomes that define and reflect more of clients' needs. Such demand presents quality management concerns for many organisations targeting service delivery. In this study, service delivery refers to a business framework that describes a firm's intangible activities that satisfy

customers' needs (Arhete & Erasmus 2016; Shittu 2020). The effect of quality in service delivery has been linked to the potential of TQM (Prajogo & Sohal 2006). Anafo and Appiah-Nimo (2018) argued that the desired impact of TQM on the organisation is often enormous, acknowledging that the practice of TQM traverses across economic sectors. Some studies amplify the claim that TQM implementation in the healthcare sector results in higher quality healthcare, improved patient satisfaction, better employee morale, and increased productivity and profitability (Ahmad 2015:87; Mosadeghrad 2013).

Contextualising this study at the Queen 'Mamohato Memorial Hospital (QMMH) in the Kingdom of Lesotho was primarily conceived around the unique private-public partnership (PPP) model of the hospital's management and organisation. In line with the view of Lang (2016), this informs the expectation that the hospital's quality management success will spill over positive effects on other healthcare institutions across Lesotho. Furthermore, the hospital's size and its outstanding facilities fit well with the need to generate fairly sufficient data that could address this study's questions. While issues of service delivery across organisations in Lesotho continue to draw scholarly attention, Lang (2016) pointed out the sorry state of service delivery in the QMMH of Lesotho (Dick-Sagoe, Asare-Nuamah & Dick-Sagoe 2021). Moremoholo (2017) revealed that despite the continuous commitment of the management of the QMMH towards demonstrating capabilities that could reflect quality management, there remains a persistent challenge of service delivery in the institution. These challenges reflect various aspects of the institution, including the increasing rate of employee turnover and client dissatisfaction. This study, therefore, attempts to establish the key challenges in the implementation of TQM in QMMH, given the relatively little research on service delivery in the healthcare sector of Lesotho (Ahmad et al. 2016). In the same context, the study addressed the following questions: (1) What classification of the growing varieties of TQM implementation challenges relates to service delivery at the QMMH? and (2) How significant are the challenges?

Literature review

A large amount of literature on TQM in the healthcare sector has emphasised the importance of executing sustainable strategies in the delivery of quality healthcare services (Alghamdi 2018; Daqar & Constantinovits 2020). Healthcare service providers also recognise the need to offer quality service to clients and seek to balance their resources and the needs of patients as part of sustainability practices (Faezipour & Ferreira 2013). A growing amount of such literature has placed little emphasis on the contributions of TQM to service delivery (Daqar & Constantinovits 2020; Halis, Twatt & Halis 2017). Parasuraman, Zeithaml and Berry (1988) defined service quality in terms of the gap between the expectations of customers from services and their perceptions of the actual services provided. Alzaydi et al. (2018) concur with the views of Parasuraman et al. (1988), which seem to suggest that the

concept of quality may be subjective, indicating expectations from customers against services delivered, thus implying that where the perceived service meets or exceeds the expected service, there could be a possibility that service would be of high quality.

Taken simultaneously as a management philosophy and management method, there seems to be no consensus on the definition of TQM (Munizu 2013:184; Sadikoglu & Olcay 2014). Many healthcare organisations utilise various industrial quality management strategies, such as quality assurance and continuous quality improvement. Total quality management implementation tends to enable healthcare organisations to identify customer requirements, benchmark for best practices, improve processes to deliver appropriate care and reduce the frequency and severity of medical errors. Total quality management implementation may lead to higher quality care, improved patient satisfaction, better employee morale, and increased productivity and profitability (Mosadeghrad 2015). Accordingly, many healthcare organisations have increasingly implemented TQM principles to improve the quality of outcomes and efficiency of healthcare service delivery. This review acknowledges the key components of TQM, which include leadership, strategy, people, resources, and process (Zakuan et al. 2012). These components are recognised in the literature to enable the operationalisation of TQM for service delivery (Antunes et al. 2021).

Implementing total quality management in service delivery

Based on certain principles and elements, TQM implementation may require various approaches and strategies, and its success may vary from one organisation to another (Alamri et al. 2014). There are studies that seem to suggest that some implementation approaches may incorporate certain aspects of the problem-solving models to address quality management-related issues (Kanji & Asher 1993). Such studies consider the human element associated with TQM implementation. Some other studies have identified the relevance and compatibility of Six Sigma with the implementation of TQM (Abd-Elwahed & El-Baz 2018; Guspianto, Asyary & Ibnu 2021; Saxena & Srinivas Rao 2019). Research, such as that conducted by Alamri et al. (2014), has illustrated various approaches and strategies for TQM implementation, as indicated in Table 1.

Implementation challenges

There are perspectives on TQM implementation challenges in the literature that are known to relate to healthcare organisations (Abuosi & Atinga 2013; Paraschivescu 2017). Distilling the literature, this study, therefore, attempts to classify these perspectives into three categories of challenges, namely (1) organisation-oriented challenges (Khurniawan et al. 2020; Paraschivescu 2017), (2) management-oriented challenges (Algunmeeyn & Mrayyn 2022; Talib & Rahman 2015), and (3) client-oriented challenges (Bhat & Rajashekhar 2009; Talib & Rahman 2015). Given the encompassing nature

TABLE 1: Total quality management approaches.

TQM approaches	Strategies
1 TQM Element Approach	Emphasises basic business principles and relevant tools of TQM and promises to incorporate the various elements of TQM in the implementation of TQM (Alamri et al. 2014).
2 Guru Approach	Aligns the organisation's TQM implementation to teachings and writings of leading authorities in the field of quality management (e.g., Alamri et al. 2014; Joshi 2019).
3 Organisation Model Approach	Concerned with integrating the TQM ideologies of other organisations (Alamri et al. 2014), particularly those that uphold certain principles and which have achieved success in quality management (Islam & Mustapha, 2008).
4 Six Sigma Approach	Identifies the relevance and compatibility of Six Sigma to the implementation of TQM (Abd-Elwahed & El-Baz 2018; Guspianto et al. 2021; Saxena & Srinivas Rao 2019). It provides synergy in improving hospital performance.
5 Japanese Total Quality Approach	Patterned according to the Japanese TQM experience (Alamri et al. 2014), considered to be based on the approach typically employed by Deming Prize-winning companies (Gitlow 1994).
6 The ISO 9001 Approach	Focusses on the criteria of any quality award for an organisation. For example, the European Quality Award could be adopted as the benchmark for improvement. Thus, the TQM implementation focussed on meeting specific criteria. (Ahmad et al. 2016; Fonseca 2015; Martínez-Costa et al. 2009).

TQM, total quality management.

TABLE 2: Key challenges in total quality management implementing at Queen 'Mamohato Memorial Hospital (staff).

Challenges	Frequency distribution									
	Not at all		Little extent		Some extent		Considerable extent		To a Great Extent	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Lack of management commitment	19	20.2	12	12.8	26	27.7	16	17.0	21	22.3
Inadequate training	12	12.6	25	26.3	27	28.4	10	10.5	21	22.1
Lack of employee involvement	12	12.8	13	13.8	29	30.9	18	19.1	22	23.4
Lack of teamwork	16	16.8	19	20.0	31	32.6	11	11.6	18	18.9
Lack of customer orientation	16	16.7	17	17.7	23	24.0	13	13.5	27	28.1
Inadequate communication	17	17.7	14	14.6	27	28.1	17	17.7	21	21.9
Lack of understanding of total quality management	11	11.6	19	20.0	29	30.5	15	15.8	21	22.1
Low wages and salaries	12	13.3	5	5.6	7	7.8	12	13.3	54	60.0
Lack of coordination between departments	11	12.2	9	10.0	31	34.4	11	12.2	28	31.1

of TQM and the notion that all three classifications could conceptualise quality management, this study, therefore, focusses on all three in relation to service delivery. The same stream of literature projects the underlying challenges as they relate to healthcare organisations when implementing TQM (Algunmeeyn & Mrayyn 2022; Carman et al. 2010; Sadikoglu & Olcay 2014).

The level of commitment shown to TQM implementation could determine the extent of its success. There are, however, some authors who nurture the notion that TQM implementation is one of the more critical challenges to quality-oriented organisations (Khurniawan et al. 2020; Paraschivescu 2017). Challenges in the implementation of TQM, especially in the healthcare sector, may vary according to differences in the conceptualisation of quality standards across many organisations and the conditions of other intervening variables (Fening 2017). This study sifts from the literature some of the several challenges that healthcare organisations may face when implementing TQM (Algunmeeyn & Mrayyn 2022; Carman et al. 2010; Sadikoglu & Olcay 2014). Thus, classifying these challenges could support a systematic approach to foster service delivery. In line with the literature, these challenges include those in the classifications that are more oriented to organisation, management, and clients.

Organisation-oriented challenges

The challenges of successfully implementing TQM could be linked to a set of organisational attributes. These attributes may vary from one organisation to another, and determine

the extent to which TQM objectives are achieved (Algunmeeyn & Mrayyn 2022). In distilling the literature supported by the survey results, the study identified typical challenges, as shown in Table 2. These challenges include a lack of management commitment (Olusanjo 2019), inadequate training, a lack of employee involvement, among others (Travaglione et al. 2017). This set of challenges must clearly be understood with a view to withstand their impact on the process of implementing TQM.

Many organisations have difficulties driving quality management targets. These challenges are issues that seem to be critical in implementing TQM to achieve the desired objectives and improve the quality of service delivery. Despite the necessity of having in place the required calibre of management personnel to drive implementation programmes, these forces get generic to the extent that they influence service delivery (Algunmeeyn & Mrayyn 2022). For instance, Talib and Rahman (2015) have identified organisational factors that inherently hinder TQM implementation, including inadequate planning, poor management of organisational culture, poor communication in organisations, and inadequate organisational resources.

Management-oriented challenges

A stream of research on TQM has attempted to advance the importance of supporting TQM implementation (Alghamdi 2018; Travaglione et al. 2017). Much of this research has given little or no attention specifically to managerial support for TQM ideology concerning its benefit to organisations (Isnain et al. 2021; Joiner 2017; Murenga & Njuguna 2020;

Sin, Jusoh & Mardani 2021). This section brings to the forefront the various managerial functions and activities in service delivery and highlights that the consequences of their inadequacy could pose TQM implementation challenges. Managerial support describes the extent to which an organisation's leaders support and appraise the contributions of its employees. In the context of TQM in QMMH, such support may include promoting ideas, ideals, and culture that may form the basis of policies and strategic objectives (Wassem et al. 2019).

Client-oriented challenges

Healthcare organisations have little alternative to keeping up with the continuous rise in customer expectations. In an era when customer-centred services permeate most organisational cultures, service delivery is thus becoming more challenging (Al-Neyadi, Abdallah & Malik 2018). The study assumes that the strategic and operational management activities of the healthcare service delivery system align with its growing market environment. Therefore, a service delivery system may require the right resources to deploy effectively, maximise client satisfaction, and promptly achieve operational targets (Linnander et al. 2017). What makes up hospital clients' satisfaction needs more clarity. Several methods to measure patient satisfaction have been explored (Eboli & Mazzulla 2009; Fatima, Malik & Shabbir 2018). The most explored methods include the perceived performance paradigm, the expectancy-disconfirmation paradigm, and the view of cumulative satisfaction (Zhang et al. 2022). The clients' satisfaction could focus on aspects that are of great concern to the patient; the outcome of such measurement may not justify commitments to TQM implementation (Roy et al. 2015). Areas of healthcare clients' satisfaction include cost of service, quality of service, quality of facilities, and staff expertise.

Theoretical perspectives

A plethora of theoretical perspectives have illustrated the importance of TQM and support its implementation in previous studies. Outstanding examples of such perspectives include the Juran Trilogy (Al Faruq, Rozi & Sunoko 2023; Duraković & Halilovic 2023), Deming's theory (Alauddin & Yamada 2022; Sioutou et al. 2022), and Crosby theory (Ali & Rasool 2023; Lei & Zhu 2023). The philosophical basis of these theories is the focus on satisfying customer needs, implying for organisations that increasing customer satisfaction entails being operationally excellent. These theories are based on a set of core principles, including: (1) management commitment, (2) training, (3) communication, (4) employee involvement, (5) teamwork, (6) continuous improvement, and (7) customer orientation (Adjei & Mensah 2016; Khawka 2016; Mohammed, Tibek & Endot 2013).

The Juran Trilogy is a theoretical perspective underpinned by three concepts: quality planning, quality improvement, and quality control. It implies that if a quality improvement initiative is to be successful, all quality improvement actions

must be carefully executed (Al Faruq et al. 2023). In line with the views of Sioutou et al. (2022), Deming's theory describes how persistent improvement heightens production quality and output, boosting customer satisfaction as costs decline. According to the precepts of the theory, which Alauddin and Yamada (2022) illustrate, organisations that prioritise quality improvement would inevitably see cost reductions, but those that prioritise cost reduction would inevitably see quality decline and ultimately experience cost increases. Another theoretical perspective aligning with the TQM is the Crosby theory (Lei & Zhu 2023). According to the perspectives of the theory, quality is conformance to requirements, zero defects should be the performance standard, and the measurement of quality is the measurement of cost of non-conformance. The assumptions of these theories, however, are not without criticism, as they seem to undermine the complex nature of most operations, thus negating some of the principles and assumptions of the theory's provisions in TQM implementation. Giroux and Landry (1998) point out a few grey areas that stand to challenge the integrity of the various schools of thought, which seem to inform the assumptions of TQM. They asserted the 'hard' and 'fast' approach attributed to the dictums of the theorists, which according to them, 'do not have well-established foundations in management theory' (Giroux & Landry 1998:184; Hill 1995; McArdle et al. 1995). Based on the underlying theoretical perspectives and in the context of the QMMH in Lesotho, the study hypothesises that:

Management-oriented factors are significantly responsible for TQM implementation challenges in the quest for service delivery in QMMH.

Research methods and design

Methods and data

The study applied the deductive research approach, which was supported by descriptive design and statistics. Data collection relied on the responses of the management and staff of the QMMH in Maseru, which the researchers obtained through internal means. Our data collection involved using the survey method. A face-to-face, self-administered questionnaire was used to gather information from the study participants. Statistics ascertained the significance, organisational, and managerial nature of the TQM implementation challenges. The design used close-ended questions on a five-point interval scale ranging from '(1) not at all' to '(5) great extent'.

Population and sampling

A stratified random sampling technique was employed as it was viewed as the more feasible way of ensuring that the different layers (strata) of the population are covered adequately, covering a spectrum of the hospital's staff and clients (in-patients and out-patients). Given that QMMH is a bureaucratic set-up with a formalised structure and record-keeping arrangements, there was a reliable internal sampling

frame of employees and patients from which members of a sample were drawn. There were 297 participants, comprising 98 staff and 199 clients of the hospital, drawn from a sample frame of the hospital's database.

Measurement and instruments

Data were collected using a questionnaire incorporating various instruments selected based on their ability to measure and ascertain the significance of TQM implementation challenges in service delivery. Cronbach's alpha was used to assure the instrument's consistency or precision using preliminary statistics (Barbera et al. 2021).

Ethical considerations

Ethical approval to conduct this study was obtained from the Faculty Research and Innovation Committee in view of the Central University of Technology (CUT) Research Ethics and Integrity Framework and was received on 07/02/2024. The full ethic approval number is FMSEC25719.

Analysis and results

The data analysis was done using the Statistical Package for the Social Sciences (SPSS) following the suggestions of Field (2012). Frequency analyses were done to provide descriptive assessments of respondent demographics, including responses regarding various components of TQM implementation challenges and service delivery. In response to the study's hypothesis, this section presents the challenges facing the implementation of TQM at the QMMH in terms of whether they fall within the underlying classifications. The results displayed reveal that most respondents considered the nine key challenges as obstacles to TQM at the QMMH. Our results projected that these challenges would tend to have some effect on overall quality performance. The results seem to corroborate many of those identified in the literature review (Khurniawan et al. 2020; Paraschivescu 2017), confirming all three classifications of the TQM implementation challenges (Talib & Rahman 2015).

Table 2 represents the frequencies and percentages of TQM implementation challenges in the context of the QMMH. To test the hypothesis that management-oriented factors are significantly responsible for TQM implementation challenges in the QMMH, a one-sample t-test was conducted. This was because the calculated means of all the management-oriented factors (see Table 3) were hovering around 2. Therefore, the

test was conducted to determine if each of the means could be deemed equal to 2. For the first three statements (i.e., factors) in Table 3, comparing to a value of 2 means that if the mean is less or equal to 2, the respondents are indicating a low or moderate achievement. For the last two statements (i.e., the satisfaction statements), if the mean is equal to or less than 2, it means that the respondents are dissatisfied. None of these outcomes will portray a great effort to address management-oriented implementation challenges. Thus, this will help to decide whether to reject the hypothesis.

Based on this understanding, the T-test results in Table 3 show that only the means of two of the statements are statistically significant enough to be equated to 2 (i.e., the third and fifth statements). Regarding the third statement (i.e., *managerial tasks carried out to support TQM ideology at QMMH*), the mean is 1.77 and the *p*-value is 0.012. Because the *p*-value is less than 0.05, which is the significance level at which the test was conducted, the result is statistically significant, and the mean of 1.77 can be deemed equal to 2. This means that managerial tasks are moderately carried out to support the TQM ideology at the QMMH.

Regarding the fifth statement (i.e., *level of satisfaction with the overall management performance in the hospital*), the one-sample t-test indicates that the mean is 1.83 (*p*-value = 0.046 < 0.05). This means that staff are dissatisfied with the overall management performance of the hospital. The first, second, and fourth statements (factors) have means around 2 that cannot be deemed as equal to 2 because their *p*-values are greater than 0.05, the significance level of the test. For example, the first statement (i.e., *TQM ideology is supported by the management of the QMMH*) has a mean of 1.97 and a *p*-value of 0.805, which is greater than 0.05. Although the means of these three statements are not statistically significant enough to be deemed equal to 2, they also do not necessarily indicate a great effort towards addressing management-oriented challenges in the implementation of TQM at the QMMH. This is because the means obtained may only be a chance occurrence. According to Field (2012), any test result that is not statistically significant is likely to have been obtained by chance.

Table 4 presents the demographic data for the staff and clients of QMMH that responded to the survey.

Most of the staff respondents were female, representing 75.5%, while 24.5% were male. Most staff respondents (72.0%)

TABLE 3: One sample T-test for management-oriented challenges.

Managerial factors	Mean	s.d.	Test value = 2			
			t	df	p	Mean difference
TQM Ideology support by management of the QMMH	1.97	0.936	-0.248	73	0.805	-0.027
Adequate resources for TQM implementation	1.84	0.873	-1.655	80	0.102	-0.160
Managerial task carried out to support TQM ideology at the QMMH	1.77	0.821	-2.556	81	0.012	-0.232
Level of satisfaction with quality management intervention at service delivery	2.05	0.862	0.583	98	0.561	0.051
Level of satisfaction with overall management performance in the hospital	1.83	0.837	-2.020	100	0.046	-0.168

TQM, total quality management; QMMH, Queen 'Mamohato Memorial Hospital; s.d., standard deviation; df, degrees of freedom.

in the study were lower-level employees, 20.0% were supervisors, and managers constituted only 5.0%, and 3.0% were staff of another status. There were 35.7% of the staff respondents who have been working at QMMH for a period between 7 years and 10 years; 26.5% of the respondents have

been in the organisation for the period between 3 years and 7 years; and 9.2% of the respondents have been in the organisation for more than 10 years.

TABLE 4: Profile of respondents.

Variable	Category	Frequency	%
Staff demographics			
Gender	Male	24	24.5
	Female	74	75.5
Age bracket (years)	18–25	9	9.2
	26–35	48	49.0
	36–45	25	25.5
	46–55	15	15.3
	56 and above	1	1.0
Ethnic origin or race	Black Basotho	89	90.8
	White people	1	1.0
	Other African origin	6	6.1
	Indian people	1	1.0
	Other Asian people	1	1.0
Educational level	High school	3	3.0
	Undergraduate	58	58.0
	Postgraduate	39	39.0
Years of employment at QMMH	Less than 1	7	7.1
	1–3	21	21.4
	3–7	26	26.5
	7–10	35	35.7
	More than 10	9	9.2
Staff status in the hospital	Lower-level employee	72	72.0
	Supervisor	20	20.0
	Manager	5	5.0
	Others	3	3.0
Clients' demographics			
Gender	Male	64	32.2
	Female	135	67.8
Age bracket (years)	18–25	35	17.6
	26–35	55	27.6
	36–45	37	18.6
	46–55	29	14.6
	56–65	26	13.1
Ethnic origin or race	65 and above	16	8.0
	Black Basotho	196	98.5
	Other African	1	0.5
	Indian people	1	0.5
	Education	Middle school	48
Education	High school	79	39.7
	Undergraduate	54	27.1
	Postgraduate	16	8.0

QMMH, Queen 'Mamohato Memorial Hospital.

TABLE 5: Frequency table on perceptions of service delivery in terms of service quality by the clients of Queen 'Mamohato Memorial Hospital (clients).

Service delivery	Frequency distribution									
	Not at all		Little Extent		Once or twice in six months		Considerable Extent		To a great extent	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Awareness of patient service policy	93	46.7	16	8.0	10	5.0	14	7.0	66	33.2
Hospital equipped with the necessary facilities	1	0.5	6	3.0	8	4.0	26	13.1	158	79.4
Easy of scheduling appointment	13	6.5	8	4.0	12	6.0	9	4.5	156	78.4
Satisfaction with the waiting time before attended to	12	6.0	10	5.0	18	9.0	18	9.0	141	70.9
Satisfaction with the quality of healthcare	4	2.0	4	2.0	4	2.0	17	8.5	170	85.4
Likelihood of recommending the services of the hospital	2	1.0	2	1.0	3	1.5	13	6.5	179	89.9

Additionally, Table 4 represents the frequencies and percentages for the demographic variables for clients. Of the 199 respondents, 67.8% were female, while 32.2% were male. For the age category, 27.6% of respondents were between the ages of 26 years and 35 years, and 18.6% were between the ages of 36 years and 45 years. Another statistic to note is ethnicity; black Basotho were in the majority with 98.5%. Other Africans and Indians followed with 0.5%. From the total number of clients who responded to the survey (Table 4), 24.1% had a middle school education, 39.7% had a high school education, 27.1% had undergraduate degrees, and 8.0% had postgraduate degrees.

Table 5 represents the frequencies and percentages for perceptions of service delivery to clients. The quality of healthcare offered by the hospital was satisfactory for most clients. Only 4 (2.0%) of the total respondents were not satisfied with the quality offered. Only 2 (1.0%) of the total number of clients would not recommend the services of the hospital, and most of the clients are likely to recommend the service of the hospital, even though QMMH serves as the national referral hospital for Lesotho.

Discussion

Based on a usable sample of 297 participants, comprising 98 staff and 199 clients, the current study ascertained the significance of managerial-oriented factors in TQM in the quest for service delivery in the QMMH in Lesotho.

Findings based on empirical evidence corroborate the literature review and reveal various challenges organisations such as the QMMH could experience in implementing TQM (Fening 2017; Khurniawan et al., 2020; Paraschivescu 2017). These results were regarded as typical of the study participants, verifying important causative aspects, such as variations in how the QMMH staff and clients conceptualise quality standards and the circumstances surrounding other extraneous variables. The study further classified key challenges into three categories: organisation-oriented, management-oriented, and client-oriented challenges. This resonates with prior studies that highlighted various challenges (Algunmeeyn & Mrayyn 2022; Carman et al. 2010;

Sadikoglu & Olcay 2014) and lacked more encompassing classifications.

The empirical study assessed a set of managerial factors (Talib & Rahman 2015) that represent managerial-oriented challenges, demonstrating that these factors are critical to the quality of service delivery. Our results confirm that all staff respondents, in various circumstances, experienced these managerial challenges from a little extent to a great extent in various percentages. The analysis of the results of the staff respondents equally informed our conclusion, as indicated in Table 2 and Table 5. The explanation is that most of the factors included in the implementation challenges (Abuosi & Atinga 2013; Paraschivescu 2017) reveal themselves as management-oriented. Furthermore, the one-sample t-test results in Table 3 confirmed that management-oriented challenges are a hindrance to the implementation of TQM in QMMH, thus leading to a failure to reject the study's hypothesis that management-oriented factors are significantly responsible for TQM implementation challenges in the quest for service delivery in QMMH.

Limitations and recommendations

This study has three main limitations that future research could overcome. The scope of the research accommodated little regarding the TQM implementation perceptions of clients and other stakeholders of the QMMH who could provide more valuable information to the study. For instance, if third-party service providers of the QMMH were included in the survey, it would have increased the number of participants. Some assumptions nurtured before empirical investigation could have influenced the direction of our analyses, particularly concerning factors contributing to the underlying implementation challenges. The study's literature review could have been more exhaustive, considering the mass of literature on TQM relating to the healthcare sector. While the study provides directions that strengthen the effectiveness of the TQM concept and its implementation, it also suggests that the capacity-building of a hospital's management team drives TQM implementation. This is given the need to improve competencies and skills that support effective and sustainable quality performance. The study suggests the need to consider continuous improvement in the shortcomings of the variables that constitute implementation challenges.

Conclusion

The current study sought to examine the significance of TQM implementation challenges in the QMMH as it relates to the increasing quality management concerns of many organisations targeting service delivery. The study's analysis presents a more comprehensive classification of TQM implementation challenges in the QMMH and the significance of such challenges. The distilled empirical evidence supported by the literature suggests that these challenges are more oriented towards the organisation, management, and clients at the QMMH. Finally, the study's findings reveal

directions for TQM implementation to achieve service delivery, particularly in the QMMH of Lesotho. The study is a pioneering attempt to illuminate the broader classification of TQM implementation challenges and contributions as a dependable quality management approach to service delivery in the healthcare sector, dispelling doubts about the effectiveness of the TQM concept in service delivery.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

T.G.M., P.K.H., and K.N.O. contributed to the design and implementation of the research, literature review, analysis of the results, discussions and to the writing of the article.

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Data availability

The data that support the findings of this study are available from the corresponding author, T.G.M., upon reasonable request.

Disclaimer

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