

Effects of Leadership Styles on Quality of Health Services

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Abstract

Background: Leadership and quality of services have been linked together, where both influence each other in a significant manner. Effective leadership in the field of healthcare has attracted research attention over the last few years. One of the key areas of focus by the Cameroon government, which is believed to better the country's health care sector, has been the quality of leadership. Claims have been made that the most effective way of achieving high-quality service delivery would be through strong leadership. On the other hand, the strength of the leadership within an organization was linked to the type of leadership style adopted by the organization. Therefore, it is paramount that research is conducted to assess the link between the type of leadership style and the quality of services among health workers.

Methods: The study used a descriptive research design with a simple random size of 150 health workers of the CBCHS. Data were collected using closed-ended questions and analyzed using IBM SPSS Statistics™ Version 20. Inferential statistics were used to determine the effects of leadership style on the performance of health workers. The mean comparison of quality scores across the different types of leadership styles was using One Way ANOVA.

Results: The most common leadership style among the hospitals of the CBCHS is the transformational leadership style followed by task-focused, person-focused, transactional, and passive-laissez-faire. Transformational leadership style was associated with higher scores for maintaining good public relations and customer care than other leadership styles. The effect of leadership styles on the quality of work was not confirmed as the results were not statistically significant.

Conclusion: Leadership styles play a critical role in improving the quality of work in healthcare settings. Health-related outcomes differ from one setting to another based on the different leadership styles. Although the effect of leadership style on the quality of work was not statistically significant, further studies should explore the role of leadership in influencing other organizational parameters such as motivation and quality of care expectations.

Keywords: Leadership style, health services, quality, health workers, hospitals, Cameroon.

Introduction

Leadership and quality of services have been linked together, where both influence each other in a significant manner. As a result, there has been numerous and deliberate research on styles of leadership in the bid to improve the quality of services. As described by Gipson et al., a leadership style is an approach at which leaders provide direction, implement plans, and motivate the workers [1]. The process of

Article Information

Article Type: Research Article

Article Number: JHSD-144

Received Date: 13 December, 2021

Accepted Date: 16 February, 2022

Published Date: 23 February, 2022

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Citation: Warri D (2022) Effects of Leadership Styles on Quality of Health Services. J Health Sci Dev Vol: 5, Issue: 1 (08-16).

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managing workers and making sure that their services are of the required quality requires a leader with the abilities of motivating and providing a vision for the subordinates [1]. It has also been argued that leaders, who set and strive to achieve smart goals while empowering the subordinates to achieve the goals, have a higher likelihood of achieving the goals of the organization [2]. In the recent past, the research sphere focusing on investigating the leader's influence on managing the quality of services among the workers has been highlighted as one of the most developing areas [2]. The reason behind this is that leaders have a critical role in ensuring the formulation of collective norms and assisting workers to face and resolve arising challenges. The critical importance of leaders on workers has led to the creation of new styles of leadership based on which approach can provide value while improving the quality of services [1]. As noted by Kingue et al., one of the key areas of focus by the Cameroon government, which is believed to better the health care sector within the country, has been the quality of leadership [3]. Due to the poor economic status of Cameroon, substantial increases in the country's health budget are not likely to occur in the near future. As a result, the country has chosen the technique of capitalizing on the existing potential as the major strategy for reducing the problems in health service delivery. The strategy majored in coordination and facilitation of the health care programs through improved leadership. This is because, over a long period, the country suffered from the problem of poor stakeholder coordination in the health sector. A stakeholder meeting organized in the year 2010 with over 200 participants recommended that the Ministry of Public Health was to mobilize a National Coordinating Committee composing of representatives of all the major stakeholders [3]. The committee has since then served as the umbrella organization for developing human resources for health, raising awareness of the issues surrounding human resources for health, and ensuring appropriate leadership exists among health workers. As revealed by Kingue et al., since 2006, strong leadership within the health sector has led to the facilitation of the process of moving to an evidence-based approach to the development of human resources for health in Cameroon [3]. The leadership has enhanced the collaboration between Cameroon's health sector and the ministry, fostering relevant discussions and dialogue while increasing trust between various stakeholders.

Cameroon is classified among countries with a high shortage of health workers in addition to having complications due to the inequalities in the geographic distribution of the health workers [4]. The shortfall has significantly impeded Cameroon's progress of improving the quality of services within the health sector, hindering the country's ability to meet the Sustainable Development Goals (SDGs). According to Kingue et al., the implementation of the Cameroon's SDGs is done against the backdrop of an update of development strategies and policies, which facilitates their integration [3]. Despite the integration of all goals within the SDGs, a clear emphasis has been given on the goal of ensuring healthy lives and promoting well-being for all at all ages. This goal focuses on human health, mainly through improved quality of service

delivery by health workers. Claims have been made that the most effective way of achieving high-quality service delivery would be through strong leadership. On the other hand, the strength of the leadership within an organization was linked to the type of leadership style adopted by the organization [5]. Therefore, it is paramount that research is conducted to assess the link between the type of leadership style and the quality of services among health workers.

The present study explored the effects of leadership styles on quality of services in hospitals of the Cameroon Baptist Convention Health Services (CBCHS). This article presents the methods and findings of the study and discusses these findings in relation to previous research on the relationship between leadership styles and the performance of health workers.

Research Objectives

The study's main aim was to investigate how leadership style and adoption affected the quality of healthcare services. The specific objectives, therefore, included the following.

- To investigate the most common leadership style among hospitals of the CBCHS.
- To assess the quality of services by health workers of the CBCHS.
- To compare the quality of services by health workers in hospitals that use various leadership styles.

Conceptual Framework

This study was anchored on the trait theory of leadership. The theory suggests that leaders are born with leadership qualities and that those individuals who possess the correct traits and qualities are better suited to lead. The theory plays a significant role in identifying behavioral characteristics that are common in leaders. The review of the literature highlighted self-confidence, drive, honesty, cognitive ability, and integrity as the most commonly observed traits of successful leaders [6]. Over the years, researchers have emphasized the existence of various characteristics necessary for one to become a good leader, suggesting that leadership is somehow predestined in some way, while unlikely or not possible in some other people [7].

It is out of the various leadership characteristics that researchers have identified different leadership styles. Hence, it is arguable that there are certain leadership styles more common to some leaders than others based on the leadership characteristics possessed by the leaders. Nonetheless, Sfantou et al. observed that leadership style might be applicable in one person than another due to a combination of many other factors [8]. In research on leadership, Scott-Jackson and Michie, claimed that good leadership is as a result of the interaction between the individual and the social situations and not necessarily a result of a predetermined set of traits [9].

However, previous authors unanimously agreed that the quality of leadership is a significant factor in determining the effectiveness of workers in a team. These authors have shown the importance of team effectiveness, and the significant

majority have made this topic the main aim of their research works [10]. The management of workers and making sure that they perform their duties effectively requires the leader to have the ability to motivate and provide a vision for their subordinates. The available literature presented a wide discussion of leadership and its role in ensuring better quality of services [11]. According to Shuffler et al., clarity of expectations and requirements among employees are critical requirements for their good performance. Numerous organizations have been found to stress the formulation of the team and workflow with the aim of increasing the efficiency of the organizational performance [12]. This is done with recognition of the importance of the leader's role in the organization. The leader should clearly define the responsibilities, duties, and needs of every worker as a way of showing commitment to their role in the organization. In short, as described by Alonderiene and Majauskaite, the top-level management expectations should be identified and communicated properly to leaders and their subordinates [12].

Research Hypothesis

The study was guided by the following research hypothesis.

H1: The type of leadership style affects the quality of healthcare services indicated by patient engagement, clinical effectiveness, and patient safety.

Methods

Research approach

The study adopted a quantitative research method, an approach that entails the gathering of numerical data, analyzing it using mathematical or statistical models, and drawing conclusions from the analysis results [13]. The alternative research methods which could also be applied in medical research are qualitative and mixed research. The qualitative approach entails observing qualitative data and critically analyzing the trends they depict intending to make conclusions [14]. On the other hand, a mixed research method entails mixing of aspects of both qualitative and quantitative research approaches in a single study [15].

The study sought to seek answers about what effects do various leadership styles have on the quality of services by health workers when adopted by hospitals of the Cameroon Baptist Convention Health Services. Clearly, these were the what, when, and who types of questions. According to Bruce et al., the quantitative method is best used in answering what, when, and who questions and not well suited to how and why questions [16]. Hence, the type of questions that the study is set to answer justifies the choice of the quantitative research method. Additionally, adopting a quantitative research method had numerous advantages. First, quantitative data collection methods led to the gathering of very consistent, precise, and reliable data [16]. Second, the findings of the study would easily be generalized to the other settings. Above all, the approach would allow the use of standard procedures enabling the researcher to compare the results with other studies done in the past or from different regions [13].

Research design

The study used a descriptive research design. The design falls under the category of non-experimental research design techniques and is critical for describing situations or cases under their natural occurrences [15]. The design is theory-based and is created by gathering, analyzing, and presenting the data. Hence, the design enabled the researcher to provide insights into the reasons for the research while allowing for the answering of the research question [17]. A major advantage that justifies the choice of descriptive research design is that the participants were investigated in their natural environment. The move allowed the researcher to give the true picture of the adoption of various leadership styles as well as the quality of services among health workers in hospitals of the Cameroon Baptist Convention Health Services.

Population and sample

The study targeted a population of all health workers in hospitals of the CBCHS. The CBCHS is a faith-based healthcare organization in Cameroon that runs a network of health facilities including hospitals, integrated health centers, primary health centers, a central pharmacy and many other programs that contribute to enhancing patient care. The health facilities of the CBCHS are found in eight of the ten Regions of Cameroon.

Clearly, the target population was vast. Hence, gathering data from all the health workers through a census was not possible within the limited time of the research. The study therefore, opted for a sample survey technique. A simple random sample was done to represent the target population. The sampling method entails selecting persons for the study through a process that ensures all members of the target population have equal probabilities of being selected for the study [15]. The approach is advantageous as it eliminates possibilities of selection bias. The size of the sample was determined based on the margin of error, confidence level, and the expected variance [15]. The researcher used an error of +/-5. The confidence interval was set at 95%, meaning that the researcher was 95% sure that the parameters of the population would be within the provided intervals. Further, due to differences in location of hospitals, the study observations were expected to have a high variation of 31.2 standard deviations. With the set values for the three factors, the study used the formula presented below, which was described by Chow et al., to compute the sample size [18].

$$n = \left(\frac{Z\sigma}{E} \right)^2$$

Where; n is the minimum value of the expected sample size, Z the normal probability score for a 95% level of confidence, sigma (σ) the standard deviation and E the margin of error. Hence, the sample size was obtained as,

$$n = \left(\frac{1.96 \times 31.2}{5} \right)^2$$

$$n = 149.6 \approx 150$$

Data collection and description

The study used questionnaires as the research instrument

for data collection. In particular, the study used standard questionnaires with close-ended questions. Therefore, the questionnaires provided similar questions to all respondents with the same set of answers from which the respondents choosed. The closed nature of the questions enabled the researcher to gather quantitative data, which allowed for standard ways of analysis as well as the application of statistical models [15]. The questionnaires have an advantage over the other possible data collection methods because they have the ability to gather a large amount of information from a large sample in a short period and in a relatively cost-effective way. The questionnaires were designed in a way that collected data classifiable into three broad categories, namely, the demographic factors, independent factors, and dependent factors. The demographic factors provided information about the respondents' demographics. The major variables under this category of factors were age, gender, work experience, name of hospital, and region. These data variables in the demographic factors category helped in describing the characteristics of the sample while explaining the reasons for other unaccounted variations in the response or dependent variables [19].

The category of independent factors constituted all variables which informed about the leadership styles and their adoption levels. The variable on the leadership style was measured using a categorical scale where respondents selected the leadership style adopted by the leadership of the hospital from a list. The other variable, the adoption level, was measured on an ordinal scale where the respondents selected the adoption level of the leadership style within a scale of 1-5 where 1 and 5 represented low and high adoption, respectively [19]. On the other hand, the category of dependent factors included all variables that would provide information regarding the performance of the selected health workers. These variables were those that promote patient engagement, clinical effectiveness and patient safety [20]. The study mainly relied on the health worker's quality of service delivery score in the annual performance evaluation which included variables like application of technical skills, quality of work, initiative, self-management, public relations and spiritual care.

Scales of measurement

Both the independent and dependent variables were examined using various scales. The independent variables consisting of leadership style and adoption levels utilized categorical and ordinal scales respectively. Similarly, the dependent variable was measured on a five-point Likert scale. All scales including the dependent and independent variables had good reliability as measured by Cronbach Alpha (.86).

Data analysis

The analysis entailed the calculation of both descriptive statistics and inferential statistics. The descriptive results helped in showing the overall characteristics of the data using the central tendency measures, the dispersion measures, and distribution parameters [15]. Conversely, the inferential statistics helped in revealing the effects of leadership style

on the performance of the sampled health workers. The mean comparison of quality scores across the different types of leadership styles was using one-way Analysis of Variance (One Way ANOVA) [15]. The one-way analysis of variance is a statistical technique of data analysis used to assess whether there exist any statistically significant differences among means of more than two independent groups. All the analysis was performed using IBM SPSS Statistics™ Version 20.

Ethical considerations

The study considered all the ethical requirements. In particular, there was informed consent, voluntary participation, confidentiality, and anonymity of respondents. The respondents signed an informed consent form showing their agreement to participate in the study voluntarily. The filled questionnaire forms were handled by the researcher alone and ensured confidentiality. Information saved in the researcher's computer was password protected. Anonymity of the participants was maintained. No identifying information was requested from the participants. Lastly, ethical clearance was obtained from the Institutional Review Board (IRB) of the CBCHS.

Results

The results of the study are presented in reference to the aims of the study, which were to explore the effects of leadership styles on the quality of services offered by the health workers of CBCHS. The current study's objectives were addressed by using both descriptive and inferential statistics. IBM SPSS Statistics™ Version 20 was used for statistical analysis.

Tests of Normality

Making generalizations about the effect of the various leadership styles on the quality of services offered by healthcare workers in hospitals requires the use of inferential statistical tests. Parametric statistical tests are usually used if the sample data is normally distributed with a set of parameters, while nonparametric statistical tests are applied if there is no information about the distribution of the population parameter [21]. Ghasemi and Zahediasl recommended the use of the Shapiro Wilk test for normality if the sample size is small (>50), and can handle up to the sample size of 2000. In addition, the test is based on the correlation between the data and the corresponding normal scores and provides better power compared to the Kolmogorov-Smirnov test [21]. The Shapiro-Wilk test showed that all the dependent variables were approximately normally distributed ($p > 0.01$) (See Table 1). Therefore, the data was parametric.

Reliability of the data

To study the internal consistency of the data, the researcher calculated Cronbach's alpha, corrected item-total corrections, and the alpha coefficients. The overall Cronbach's alpha for the Quality of Services scale was 0.86 (Table 2), which is regarded as good reliability [22]. It was also established that the exclusion of any item from the scale did not increase the level of internal consistency obtained as

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|-----------------------------------|---------------------------------|-----|------|--------------|-----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| Average Quality of Service Scores | .126 | 149 | .000 | .953 | 149 | .000 |

^aLilliefors Significance Correction

Table 1: Tests of Normality.

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|--|------------|
| .861 | .864 | 6 |

Table 2: Reliability Statistics.

| Scale Item | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Squared Multiple Correlation | Cronbach's Alpha if Item Deleted |
|---|----------------------------|--------------------------------|----------------------------------|------------------------------|----------------------------------|
| Participant's score for application of technical skills | 21.2215 | 5.741 | .736 | .588 | .823 |
| Participant's score for quality of work | 21.1879 | 6.248 | .677 | .545 | .836 |
| Participant's score for taking initiatives in performing duties | 21.2416 | 6.076 | .634 | .447 | .842 |
| Participant's score for team work | 21.2215 | 5.876 | .700 | .522 | .830 |
| Participant's score for maintaining good public relations and customer care | 21.2886 | 5.545 | .758 | .593 | .818 |
| Participant's score for demonstration of Christian love and care to clients | 21.2886 | 6.369 | .452 | .250 | .876 |

Table 3: Item Total Statistics.

observed in table 3.

Demographic factors

Participants of all ages were represented in the current study (from 0 to 59 years). A majority of the respondents were aged between 30 and 39 years (36.4%) while those below 20 years accounted for only 0.7 percent. A majority of the participants were female (56.3%). A majority of the respondents (37.7%) had worked for more than 12 years as compared to those who had worked for less than 2 years (9.3%). Bansa Baptist Hospital accounted for the highest number of participants (28.5%), followed by Mbingo Baptist Hospital (25.2%). Regarding the regions, a majority of the participants were drawn from the Northwest (53.6%), while the least participants were drawn from the Adamawa region (2%). The demographic factors are summarized in table 4.

Descriptive statistics

Leadership Styles: In order to investigate the most common leadership style among the hospitals of the Cameroon Baptist Convention Health Services, the researcher conducted descriptive statistics such as the frequencies and percentages. According to the results shown in table 5, about 54 percent of the participants used the transformational leadership style, 14 percent used task-focused style, 11 percent used person-focused style of leadership, 8 percent used transactional leadership style, and 7 percent used passive laissez-faire leadership style. From this analysis, the most common leadership style among the hospitals is the transformational leadership style, while the least common style is the passive-laissez-faire.

The adoption level of the leadership styles among the participants was also assessed on a scale of 1-5 where 1 represented very low, 2 represented low, 3 moderate, 4 high, and 5 very high level of adoption. As shown in table 5,

Person-focused style showed the highest level of adoption ($M = 3.59, SD = .618$), followed by task-focused style ($M = 3.50, SD = .598$), transformational ($M = 3.38, SD = .624$), transactional ($M = 3.17, SD = .718$), and passive laissez-faire ($M = 2.91, SD = .831$) in that order.

Quality of Services

To assess the quality of services offered by health workers in hospitals in CBCHS, the researcher applied descriptive statistics such as percentages, means, and standard deviations as shown in table 6 and table 7. As shown in table 6, about 35 percent of all respondents reported an excellent application of technical skills, while about 55 percent reported merit score, and 10 percent good application of technical skills. With regard to the quality of work, 32 percent reported excellent, 63 percent reported merit, while only 4 percent reported good work quality. In taking initiative, about 99 percent gave a positive score while only 1 percent indicated that the dimension needed improvement. A similar trend was noticed in regard to teamwork, maintaining good public relations and customer care, and demonstration of Christian love and care to clients where over 98% of the participants gave good to excellent scores.

Generally, the participants reported high quality of service scores in all dimensions assessed. As shown in the table below, quality of work recorded the highest scores ($M = 4.30, SD = .540$), followed by application of technical skills ($M = 4.27, SD = .634$), team work ($M = 4.27, SD = .622$), taking initiative for performing duties ($M = 4.25, SD = .615$), demonstration of Christian love and care to clients ($M = 4.21, SD = .679$), and maintaining a good public relations and customer care ($M = 4.20, SD = .666$) in that order. Table 7 summarizes the mean scores and standard deviations of the quality-of-service dimensions.

| Characteristic | | n | % |
|------------------|------------------------------|----|------|
| Age | 0-19 | 1 | .7 |
| | 20-29 | 38 | 25.2 |
| | 30-39 | 55 | 36.4 |
| | 40-49 | 35 | 23.2 |
| | 50-59 | 22 | 14.6 |
| Gender | Male | 65 | 43.0 |
| | Female | 85 | 56.3 |
| Work Experience | Less than 2 years | 14 | 9.3 |
| | Between 2 and 5 years | 48 | 31.8 |
| | Between 5 and 8 years | 14 | 9.3 |
| | Between 8 and 12 years | 18 | 11.9 |
| | More than 12 years | 57 | 37.7 |
| Name of Hospital | Mbingo Baptist Hospital | 38 | 25.2 |
| | Banso Baptist Hospital | 43 | 28.5 |
| | Baptist Hospital Mutengene | 27 | 17.9 |
| | Mboppi Baptist Hospital | 15 | 9.9 |
| | Etoug Ebe Baptist Hospital | 25 | 16.6 |
| | Baptist Hospital Banyo | 3 | 2.0 |
| | Dunger Baptist Hospital Mbem | 0 | 0 |
| Region | Northwest | 81 | 53.6 |
| | Southwest | 27 | 17.9 |
| | Littoral | 15 | 9.9 |
| | Centre | 25 | 16.6 |
| | Adamawa | 3 | 2.0 |

Table 4: Demographic Characteristics.

| Characteristic | Frequency | Percentage (%) | Adoption Level | |
|-----------------------|-----------|----------------|----------------|------|
| | | | M | SD |
| Passive Laissez-faire | 11 | 7.3 | 2.91 | .831 |
| Transformational | 81 | 54.0 | 3.38 | .624 |
| Transactional | 12 | 8.0 | 3.17 | .718 |
| Task-focused | 22 | 14.7 | 3.50 | .598 |
| Person-focused | 17 | 11.3 | 3.59 | .618 |
| Other | 7 | 4.7 | 3.00 | .817 |
| Total | 150 | 100 | 3.35 | .667 |

Table 5: Leadership Styles in CBCHS.

| Characteristics | Responses | | | | |
|---|-----------------------|-----------------------|----------|-----------|---------------|
| | Deserves Sanction (%) | Needs Improvement (%) | Good (%) | Merit (%) | Excellent (%) |
| Application of technical skills | 0 | 0 | 10.0 | 54.7 | 35.3 |
| Quality of work | 0 | 0 | 4.0 | 63.3 | 32.7 |
| Taking initiatives in performing duties | 0 | 1.3 | 5.3 | 59.3 | 34.0 |
| Team work | 0 | 0 | 9.4 | 55.7 | 34.9 |
| Maintaining good public relations and customer care | 0 | 0.7 | 12.0 | 56.7 | 30.7 |
| Demonstration of Christian love and care to clients | 0 | 2.0 | 8.7 | 56.7 | 32.7 |

Table 6: Summary of Quality-of-Service Participant Scores.

Inferential statistics

To compare the quality-of-service scores across the different types of leadership styles, the researcher conducted a one-way analysis of variance. According to Roskam, a one-way analysis of variance (ANOVA) is a parametric statistical technique used to assess whether there exist any statistically significant differences among the means of more than two independent groups [15]. The independent variable was the leadership styles adopted by the leadership of the various hospitals, while the dependent variables were all the variables that provided information regarding the quality of services by the selected healthcare workers. They included

the participants' scores on the application of technical skills, quality of work, taking initiatives in performing duties, teamwork, maintaining good public relations and customer care, and demonstration of Christian love and care for clients. As shown in table 8, an analysis of variance showed that the effect of leadership style on quality of service was only significant for maintaining good public relations and customer care was statistically significant, $F(5,143) = 2.30$, $p = 0.048 > 0.05$.

Tukey's Post Hoc Test showed that transformational leader was associated with relatively higher scores for maintaining good public relations and customer care as

compared to passive laissez-faire, transactional, person-focused, and task-focused leadership style. However, the differences were not statistically significant for participants reporting the various leadership styles ($p < 0.05$). The summary of Tukey Post Hoc Tests is given in table 9.

Discussion

Effective leadership in the field of healthcare has attracted research attention over the last few years. The main aim of this study was to explore the effects of the leadership styles on the quality of services offered by workers of the CBCHS. The study sought to establish the significance of improving healthcare service quality through improved leadership skills. The specific objectives were to investigate the most common leadership styles in hospitals in CBCHS, assess the quality of services by health workers in the hospitals, and

compare the quality of healthcare workers in hospitals using different leadership styles.

The findings of the present study indicated that the most common leadership style among the hospitals is the transformational leadership style followed by task-focused, person-focused, transactional, and passive -laissez-faire. The transformational leadership style is widely studied within the healthcare context. For instance, Khairunnisa and Nadjib studied transformational leadership style was associated with increased job satisfaction among healthcare workers [23]. According to the study, healthcare workers were more satisfied with leaders who used transformational leadership styles. Perhaps this can be attributed to the mutual understanding between leaders and subordinates, which inspires the subordinates to support the interests of their leaders while putting personal interests aside [23].

| Characteristics | n | M | SD |
|---|-----|------|-------|
| Application of technical skills | 150 | 4.27 | 0.634 |
| Quality of work | 150 | 4.30 | 0.540 |
| Taking initiatives in performing duties | 150 | 4.25 | 0.615 |
| Team work | 150 | 4.27 | 0.622 |
| Maintaining good public relations and customer care | 150 | 4.20 | 0.666 |
| Demonstration of Christian love and care to clients | 150 | 4.21 | 0.679 |

Table 7: Mean and Standard Deviation of the Quality of Services.

| | | Sum of Squares | df | Mean Square | F | Sig. |
|---|----------------|----------------|-----|-------------|-------|------|
| Participant's score for demonstration of Christian love and care to clients | Between Groups | 2.304 | 5 | .461 | .995 | .423 |
| | Within Groups | 66.246 | 143 | .463 | | |
| | Total | 68.550 | 148 | | | |
| Participant's score for application of technical skills | Between Groups | 1.714 | 5 | .343 | .868 | .504 |
| | Within Groups | 56.447 | 143 | .395 | | |
| | Total | 58.161 | 148 | | | |
| Participant's score for quality of work | Between Groups | .335 | 5 | .067 | .222 | .952 |
| | Within Groups | 43.075 | 143 | .301 | | |
| | Total | 43.409 | 148 | | | |
| Participant's score for taking initiatives in performing duties | Between Groups | 3.893 | 5 | .779 | 2.124 | .066 |
| | Within Groups | 52.416 | 143 | .367 | | |
| | Total | 56.309 | 148 | | | |
| Participant's score for team work | Between Groups | 1.901 | 5 | .380 | .977 | .434 |
| | Within Groups | 55.288 | 142 | .389 | | |
| | Total | 57.189 | 147 | | | |
| Participant's score for maintaining good public relations and customer care | Between Groups | 4.914 | 5 | .983 | 2.302 | .048 |
| | Within Groups | 61.046 | 143 | .427 | | |
| | Total | 65.960 | 148 | | | |
| Average Quality of Service Scores | Between Groups | 1.751 | 5 | .350 | 1.530 | .184 |
| | Within Groups | 32.499 | 142 | .229 | | |
| | Total | 34.250 | 147 | | | |

Table 8: Analysis of Variance.

| Dependent Variable: Participant's score for maintaining good public relations and customer care Tukey HSD | | | | | | |
|---|--------------------------------------|-----------------------|------------|------|-------------------------|-------------|
| (I) Leadership style in the hospital | (J) Leadership style in the hospital | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval | |
| | | | | | Lower Bound | Upper Bound |
| Transformational | Passive Laissez-faire | .33182 | .21011 | .614 | -.2751 | .9388 |
| | Transactional | -.26667 | .20226 | .774 | -.8510 | .3176 |
| | Task-focused | -.25909 | .15729 | .569 | -.7135 | .1953 |
| | Person-focused | -.26176 | .17449 | .665 | -.7658 | .2423 |
| | Other | .29286 | .25753 | .865 | -.4511 | 1.0368 |

Table 9: Tukey's Post Hoc Tests.

In addition, transformational leaders often empower their subordinates to adapt well to the existing environment, thus helping them achieve their goals. The study by Nebiat and Asresash also examined the most common leadership styles in health facilities in Ethiopia and established that subordinates preferred transformational leadership to other styles such as transactional leadership style [24]. This explains why a majority of healthcare leaders in CBCHS prefer using the transformational leadership style.

The current study also established high quality of service scores for healthcare workers in CBCHS. The participants reported good to excellent scores in such dimensions as teamwork, taking initiatives in performing duties, quality of work, application of technical skills, maintaining good public relations and customer care, and demonstration of Christian love and care for patients. As demonstrated in the literature from Nebiat and Asresash and Khairunnisa and Nadjib, the implementation of the transformational leadership style is associated with such outcomes as increased job satisfaction and organizational commitment [23,24]. As such, healthcare practitioners working under a transformational leader are more likely to support active problem solving, teamwork, and taking a personal initiative in performing their duties. Therefore, the high quality of service reported can be attributed to the implementation of the transformational leadership styles by a majority of healthcare leaders.

With regard to the effect of leadership styles on the quality of work, the current study established that being a transformational leader was associated with higher scores for maintaining good public relations and customer care as compared to passive laissez-faire, transactional, person-focused, and task-focused leadership style. This aligns with the study by Boamah et al., which established that transformational leadership style was associated with strong positive effects on the subordinates, such as structural empowerment that inspired better performance [25].

However, the effect of leadership styles on the quality of work was not confirmed as the results were not statistically significant. This may be attributed to the fact that only facilities under the CBCHS were sampled. The response bias is another widely discussed phenomenon in behavioral research involving self-reported data. The phenomenon occurs when respondents offer self-assessed measures of some phenomenon. In the present study, self-response scores relating to the quality of work and leadership styles were used. Such assessments are associated with biased estimates on the self-assessed behaviors for reasons ranging from a misunderstanding of the question to social desirability bias where the respondent wants to 'look good' in the survey even if the survey is anonymous [26]. This may have introduced errors that would have influenced the significance of the research findings [27-28].

Conclusion

This study sought to investigate the most common leadership style among hospitals of Cameroon Baptist Convention Health Services, assess their quality of services, and assess the effect of leadership style on the quality of

work. The study revealed that the most common leadership style among the hospitals was transformational leadership. The study also demonstrated a high quality of services among healthcare workers working in CBCHS hospitals. They also demonstrated that leadership styles play a critical role in improving the quality of work in healthcare settings. Health-related outcomes differ from one setting to another based on the different leadership styles in use.

The current study provided valuable insight regarding the impacts of leadership styles on the quality of healthcare services. Despite the value of the findings, the study had a few methodological limitations. The study used self-reported survey questionnaires where the responses were directly generated by the study participants. The self-reported data can be subject to issues with honesty where more socially accepted answers are given by the respondents. Additionally, the measures used assess the study variables were convenient and effective when it comes to data analysis. However, using closed ended questions and Likert scales may limit the range of responses by the participants. Further, some responses that do not fit the provided selection of answers are left out and these may be critical responses to the conclusions of the study.

Therefore, further studies should focus on the development and implementation of robust models of leadership in diverse healthcare settings. For instance, future studies should go beyond the setting of Cameroon Baptist Convention Health Services hospitals and include other facilities to enhance consistency and generalization of the findings. The studies may also explore the role of leadership in influencing other organizational parameters such as motivation and quality of care expectations. The current study investigated the direct relationship between leadership styles and adoption and the quality of healthcare services. Therefore, future studies should focus include moderating effects of leadership style on the motivation of healthcare workers. Such an approach could yield more robust results than the direct effects approach. Overall, leadership is an important component for improving the quality of services within the healthcare context.

Declarations

Ethics approval and consent to participate

Ethical clearance was obtained from the Institutional Review Board (IRB) of the CBCHS. Participation in the study was voluntary for workers of the CBCHS. Respondents were each given a letter explaining the study, requesting their participation and assuring them of the confidentiality of the study. Their consent was sought, and a written informed consent was obtained from all respondents who participated in the research.

Consent for publication

Not applicable

Availability of data and materials

Not applicable

Competing interests

The author declares that they have no competing interests.

Funding

Not applicable

Author's contributions

DW conceived the original ideas, wrote the study protocol, secured ethical approval, recruited the participants, conducted the interviews, analyzed the data, wrote up the findings for publication, read and read and approved the final manuscript.

Acknowledgements

I would like to thank all the workers of the CBCHS who participated and gave their time and support to this study.

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