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Quality of life among Saudi Arabian Patients Receiving Private Healthcare: Household-BasedSurvey

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ABSTRACT

Background: As an alternative to hospitalization, home healthcare programs are assuming greater significance on a global scale due to the expanding geriatric population and the prevalence of chronic and acute diseases that require ongoing monitoring and care. In describing and evaluating the quality of life (QOL) and associated determinants of patients enrolled in the Home Health Care (HHC) program affiliated with the Ministry of National Guard Health Affairs in Riyadh, Saudi Arabia, was the overarching purpose of this study.

Methods: Participants in this cross-sectional study were HHC program enrolled patients. Utilizing the World Health Organization QOL questionnaire (WHOQOL-BREF), information regarding the various domains of patients' QOL was gathered. By fitting logistic regression models, factors associated with a low QOL score were identified.

Results: In the research, 253 patients participated. Age distribution: 67.05 (± 20.0). Morbid and sociodemographic characteristics had a substantial impact on the overall quality of life of HHC patients. The final multivariate logistic regression models identified independent associations between marital status, psychological disorders, stroke, and number of illnesses and the overall quality of life (QOL) of HHC patients (p =.022, p =.002, p =.031, and.057, respectively). In a retrospective analysis, the physical health domain score exhibited significant associations with educational attainment, psychological issues, and stroke (p =.028, p =.002, p =.007). Conversely, the psychological domain score demonstrated a significant association with age (p < 0.001) and three distinct forms of chronic ailments—pulmonary (p =.002), psychological problems (p = 0.001), and p =.002. Only the marital status exhibited a significant association with the social domain score (p =.026). There was a significant association between the environmental domain and both education level and stroke incidence (p =.017 vs..027).

Conclusions: Multiple factors are substantially correlated with the overall QOL and its domains. A significant number of these factors can be monitored and improved by enhancing the efficacy of HHC services; consequently, this will enhance patients' QOL.

KEYWORDS: Quality of life (QOL), Home health care, Saudi Arabia, WHOQOL

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BACKGROUND

Home Health Care (HHC) encompasses the delivery of medical services to patients within the comfort of their own residences, by certified healthcare professionals operating under the direction of a physician. The primary objective of home healthcare services is to assist patients in enhancing their overall well-being, promoting their independence, and enhancing their quality of life (QOL) [1]. The demand for Health Home Care (HHC) programs has witnessed a worldwide surge due to the prevalence of chronic and acute diseases requiring ongoing monitoring, as well as the aging population (approximately 70.5% of HHC patients are 65 years and older) [2].

QOL is an individual's perception of their life status in relation to their objectives, expectations, standards, and concerns, as well as the culture and value systems in which they reside, as defined by the World Health Organization (WHO) [3]. Due to the complexity and breadth of the QOL concept, it is difficult to maintain a high level of HHC services and a high QOL. Home care entails a greater number of health-related risks compared to care provided in a healthcare facility due to the generally lower level of

control. It also encompasses a diverse array of care providers, including unregulated personnel, family members, and caregivers, operating within an environment intended for activities of daily living rather than delivering regulated healthcare [4].Prior research has primarily concentrated on evaluating the quality of life (QOL) of patients in hospital environments, as opposed to non-hospital settings such as HHC [4]. A study conducted in the United States utilized the WHO QOL (WHOQOL-100) questionnaire to evaluate the QOL of one hundred HHC patients. Clinical outcomes, in addition to the physical, psychological, and environmental dimensions of quality of life, improved significantly following a patient's enrollment in an HHC program. [2]. In Brazil, the WHOQOL-100 was utilized to assess the QOL of elderly patients receiving HHC in a study. Patients had a high overall quality of life, despite some challenges, such as a limited capacity to perform daily activities, according to the findings [5]. An additional research endeavor carried out in China sought to evaluate the impact of nurse-led HHC visits and telephone patient condition monitoring on the quality of life (QOL) of opiate users infected with HIV. All four domains of QOL improved considerably following HHC visits, which ultimately led to improved clinical outcomes, increased patient satisfaction, and increased motivation to live [6]. An Austrian longitudinal study spanning one year assessed the impact of a geriatric psychiatry home treatment program on the quality of life (QOL) of elderly patients who were experiencing mental health issues. For measuring QOL, the abbreviated WHO QOL (WHOQOL-BREF) questionnaire was utilized. In contrast to the time of discharge, the outcomes demonstrated substantial progress in the physical and psychological spheres; the social and environmental spheres remained unaltered [7]. Utilizing the WHOQOL-BREF, a study conducted in Germany investigated the impact of educational nurse-led home visits on functional status and quality of life. The results of the study indicated that educational nurse-led home visits had no statistically significant positive impact on QOLF and functional status [8]. Conversely, in their randomized controlled trial, Courtney et al. (2009) found that a nurse-led home visit intervention comprising an individualized exercise program and long-term telephone follow-up had substantial positive impacts on quality of life (QOL). The interventional group exhibited higher mean scores in comparison to the control group [9].

Scholars have commenced investigating and evaluating various facets of HHC's impact on QOL. An attempt was made in Sweden to evaluate the impact of patient-centered HHC services on the quality of life (QOL) of geriatric patients. Greater patient participation in HHC planning and decision-making increased their satisfaction and, ultimately, their quality of life [10]. When the impact of home hemodialysis on quality of life was evaluated in a separate study conducted in the United States, the physical domain score increased significantly [11].

Presently, all HHC programs in Saudi Arabia are publicly funded. Since its inception in 1991, the inaugural HHC program at King Faisal Specialized Hospital has exclusively catered to individuals diagnosed with terminal cancer. The Ministry of National Guard Health Affairs launched the HHC program in late 1995 with the objective of reducing the duration of hospital stays through the provision of home health care services. The Saudi Ministry of Health initiated the national HHC program implementation in 2008 [12]. The national health care (HCC) program, as referenced in a study by Almoajel et al. (2016), seeks to "enable accessible healthcare to all individuals requiring it, irrespective of their location; with the intention of mitigating the distress associated with hospital wait times or relocations to obtain care." The program's implementation should adhere to the most effective international standards and be grounded in the Islamic values and traditions of Saudi society [12]. Nevertheless, research examining the impact of home healthcare programs on patients' quality of life (QOL) in the healthcare setting of Saudi Arabia is extremely scarce. As an illustration, a solitary investigation carried out in Riyadh examined the effects of HHC programs implemented in five distinct government hospitals. The findings revealed that 86.5% of team members reported that HHC visits did not result in any discernible improvement in the condition of their patients [12]. However, there is a lack of prior research evaluating the quality of life (QOL) of HHC patients. Therefore, the primary objective of this study was to characterize and assess the QOL of participants in the Home Health Care (HHC) program administered by the Ministry National Guard Health Affairs in Riyadh, Saudi Arabia, as well as to identify the factors that influence QOL. With any luck, the outcomes will establish a foundation of empirical evidence that can be utilized to assess and enhance the quality of the HHC program in Saudi Arabia and comparable HHC program settings throughout the region over an extended period of time.

METHODS

Study design and setting

This research employed a cross-sectional design and utilized the WHOQOL-BREF in Arabic. Within the HHC program of the National Guard Health Affairs at King Abdul-Aziz Medical City in Riyadh, the research was conducted.

Study population and sample

Included were all HHC-enrolled patients who were present at the time of the home visit and consented to partake in the research survey. An complete sample of 300 patients who were enrolled in the HHC program was surveyed. The study participants were recruited through home visits and

face-to-face interviews conducted by a social worker with adequate training who is also employed at the HHC program of the Ministry of National Guard Health Affairs.

Data collection

The data were gathered utilizing the Arabic version of the WHOQOL-BREF questionnaire, which is used to assess QOL [13]. It is one of the most thoroughly validated instruments for assessing QOL that is also universally applicable across cultures [14, 15]. It comprises a total of 26 items and assesses four distinct domains of quality of life: environmental (three items), psychological (six items), and physical (seven items). Two inquiries pertain to general health as well. On a response scale ranging from 1 to 5, each item of the WHOQOL-BREF questionnaire is assigned a score that is subsequently converted to a 0–100 scale. Concerns included in the physical domain are vitality, pain, sleep, and daily activities. The psychological domain assesses self-esteem, body image, positive and negative emotions, and thought processes. The social domain encompasses inquiries pertaining to interpersonal connections and the provision of social support. The environmental domain encompasses concerns pertaining to transportation, financial status, safety, and the domestic environment [16]. The assessment of instrument reliability was conducted utilizing Cronbach's alpha; the WHOQOL-BREF exhibited an overall reliability of 0.91 for all questions. The respective liabilities for the domains of physical health, social relationships, environmental health, and psychological well-being were 0.89, 0.81, 0.67, and 0.61. The instrument demonstrates a high degree of internal consistency, thereby establishing the reliability of the study's results. In 2016, data were gathered through face-to-face interviews facilitated by a social worker with extensive training and experience working at the HHC program of the Saudi Arabian Ministry of National Guard Health Affairs in Riyadh.

Data management and statistical analysis plan

Every item of information collected was entered into a computer utilizing IBMSPSS (version 20, Oklahoma, US). The gathered data underwent a process of verification and cleansing in order to eliminate any data entry errors. Descriptive statistics, including percentage and mean (±SD), were employed to summarize the data. Inferential statistics, including the t-test and chi-square, were utilized for comparison purposes, as deemed suitable. The mean score was computed for each domain by dividing the sum of the scores of all items in the domain by the number of items in the domain. The aggregate mean score was then computed by dividing the sum of the mean scores for each domain by the total number of domains. In order to facilitate regression analysis, participants were categorized into two groups: high-scoring and low-scoring, in accordance with previously published studies [17, 18] that utilized the median value as the cut-off point for the total WHOQOL-BREF score and four domain scores. The relationships between survey items and QOL were investigated through logistic regression analyses, with the dependent variable being the QOL score (high versus low). In the final analysis of the multivariate logistic regression model, variables that were deemed significant in univariate logistic regression (<0.05) were retained. All tests were conducted in a two-sided fashion, and a significance level of $p < 0.05$ was maintained. In the process of imputed data, the multiple imputation technique was employed [19].

RESULTS

Study respondents' characteristics

The characteristics of the respondents are detailed in Table 1. Approximately 63% of the participants identified as female. With a mean age of 67.05 (± 20.0), a mere 12% were under the age of 40, while the majority (73.3%) were aged 60 or older. Approximately 61.3% of the participants lacked literacy skills, while a mere 38.719% possessed the ability to read, write, or higher. A majority of the participants (59.7%) reported being married. An overwhelming majority (85%) were without employment, with only 15% holding positions. A minority of the respondents (13.8%) resided in private residences, while the majority (86.2%) resided in shared dwellings. In terms of the nature of their deleterious conditions, the following were represented: hypertension (60.1% of the population), diabetes (60.5%), cancer (15.4%), arthritis (28.5%), psychological issues (11.5%), pulmonary distress (08.7%), and stroke (26.9%).

HHC patients' quality of life (QOL)

Table 2 presents the mean and standard deviation of the scores for the QOL domains. In aggregate, the mean score across all four domains of quality of life was 3.78 ± 0.78. The mean scores for the domains of psychological well-being, physical health, social relationships, and the environment were 2.87 ± 0.78, 3.37 ± 0.65, and 3.37 ± 0.68, respectively.

The mean score for participants' satisfaction regarding the quality of their sleep was the greatest among the physical health items (3.19 ± 0.86). Similarly, among the social domain items, their satisfaction regarding the quality of their sex life was the highest at 4.05 ± 0.60. The quality of the environmental domain was indicated by the fact that the majority of participants (4.35 ± 0.60) were content with the conditions of their living space. Conversely, while the majority of respondents reported high levels of self-satisfaction (3.42 ± 0.69), a considerable proportion indicated experiencing negative emotions on a daily basis (3.34 ± 0.92), with regard to psychological items.

HHC patients' quality of life (QOL) by socio-demographiccharacteristics

Significant differences were observed in the overall

quality of life (QOL) scores between the two groups with regard to marital status (p = 0.002), employment status (p = 0.019), hypertension (p = 0.040), psychological problems (p < 0.001), and stroke (p = 0.003). In the physical domain, however, there were significant differences between the two groups with regard to cancer-related psychological issues and stroke, employment status, level of education, and housing type. With respect to the psychological

Table 1 Study respondent characteristics, (*N = 253*)

Characteristic	Number of participants	%
Age (Years) 67.05 ± 20.0		
Gender		
Female	160	63.2
Male	93	36.8
Education level		
Illiterate	155	61.3
Literate	98	38.7
Marital status		
Single	102	40.3
Married	151	59.7
Employment status		
Unemployed	215	85.0
Employed	38	15.0
Housing type		
Independent	35	13.8
Shared	218	86.2
Chronic disease		
Cardiac disease		
No	236	93.3
Yes	017	06.7
ypertensionNo		
	101	39.9
Yes	152	60.1
Arthritis		
No	181	71.5
Yes	072	28.5
Cancer		
No	214	84.6
Yes	039	15.4
Pulmonary disease		
No	231	91.3
Yes	022	08.7
Diabetes		
No	100	39.5
Yes	153	60.5
Psychological problems		
No	224	88.5
Yes	029	11.5
Stroke		
No	185	73.1
Yes	068	26.9

In this particular domain, statistically significant variations were noted in relation to age, educational attainment, marital status, hypertension, pulmonary disease, psychological issues, and stroke. The sole noteworthy variations within the domain of social relationships were associated with marital status and the presence of psychological issues. Regarding the environmental domain, notable variations were observed in relation to age, educational attainment, employment status, housing type, and the presence of diabetes and stroke. For further information, consult the supplementary file 1.

Factors associated with patients' overall quality of life (QOL) and its domains

The logistic regression analysis revealed that marital status (OR =.516, 95% CI [.293,.910] p =.022), psychological

problems (OR = 5.95, 95% CI [1.98, 17.93], p =.002), and stroke (OR = 2.10, 95% CI [1.07, 4.11], p =.031) were significantly associated with the overall score of QOL for HHC patients. However, the number of illnesses had a marginally significant impact on overall QOL (OR = 1.47, 95% CI [0.99, 2.20], p =.057). However, significant determinants in the physical domain included educational attainment, psychological issues, and stroke. In contrast, significant determinants in the psychological domain included age, psychological issues, pulmonary disease, and stroke. In the realm of social relationships, marital status constituted the sole significant factor. Within the environmental domain, education and stroke emerged as significant determinants. Table Three.

DISCUSSIONS

The objective of this research was to evaluate the quality of life (QOL) of patients receiving home care and to identify various factors associated with QOL among those enrolled in the Ministry National Guard HHC program. Despite the scarcity of research on the QOL of HHC patients and the impact of such programs on QOL, prior investigations have demonstrated that the utilization of HHC services effectively enhances all aspects of QOL [6]. The fact that the majority of participants in our study were, on average, older than 67.05 years indicates that geriatric patients have a greater prevalence of chronic diseases and require more HHC services [5]. This finding aligns with prior research that has observed that the majority of patients undergoing HHC are typically above the age of 60 [2, 4, 9].

HHC patients' quality of life (QOL) domains

The findings from the QOL domain scores indicate that participants were largely content with the quality of their sleep in terms of physical health. However, a study examining the relationship between HHC and QOL among cancer patients in Turkey identified sleep disorders as a significant concern among those with HHC. The variations in outcomes may be attributed to the severity of the patients' conditions, as HHC services in Turkey are exclusively extended to those in the terminal stages of their illnesses and have profound disabilities [20]. In contrast, our study encompassed all chronic patients who were enrolled in the HHC program.

Table 2 QOL domain scores for HHC patients (*N = 253*)

Domain	No.	Mean	SD
Physical health domain			
To what extent do you feel that physical pain prevents you from doing what you need to do?	253	2.17	0.99
Do you have enough energy for everyday life?	253	1.89	0.81
How satisfied are you with your sleep?	253	3.19	0.86
How well are you able to get around?	253	1.67	0.74
How satisfied are you with your ability to perform your daily living activities?	253	2.31	0.90
How much do you need any medical treatment to function in your daily life	253	1.94	0.72
How satisfied are you with your capacity for work?	253	2.35	0.92
TOTAL Score		2.22	0.85
Social relationships domain			
How satisfied are you with your personal relationships?	253	3.76	0.69
How satisfied are you with the support you get from your friends?	253	3.53	0.66
How satisfied are you with your sex life?	253	4.05	0.60
TOTAL Score		3.78	0.65
Environmental domain			
How safe do you feel in your daily life?	253	3.26	0.84
How satisfied are you with the conditions of your living place?	253	4.35	0.60
Have you enough money to meet your needs?	253	3.17	0.52
How satisfied are you with your access to health services?	253	3.97	0.65
How available to you is the information that you need in your day-to-day life?	253	2.95	0.58
To what extent do you have the opportunity for leisure activities?	253	1.66	0.82
How healthy is your physical environment	253	3.6	0.70
How satisfied are you with your transport?	253	4	0.70
TOTAL Score		3.37	0.68
Psychological domain			
How much do you enjoy life?	253	2.44	0.75
How well are you able to concentrate?	253	2.25	0.92
How satisfied are you with yourself?	253	3.42	0.69
Are you able to accept your bodily appearance?	253	2.7	0.59
How often do you have negative feelings such as blue mood, despair, anxiety, depression?	253	3.34	0.92

To what extent do you feel your life to be meaningful?	253	3.06	0.82
TOTAL Score		2.87	0.78

Participants exhibited the maximum level of satisfaction in the social domain regarding the quality of their sexual life. Conversely, their performance in the physical domain was deemed inadequate in terms of possessing sufficient energy for routine activities. A Turkish study that examined the impact of HHC on the quality of life (QOL) of patients with gastrointestinal cancer found that nearly all of the participants experienced fatigue, which is consistent with our findings. However, they also reported a reduction in sexual desire, which contradicts our results. This could potentially be attributed to the participants' chronic condition, as cancer is a prominent contributor to various forms of disabilities [21], including detrimental effects on their sexual lives. Furthermore, an alternative rationale could be ascribed to the conservative cultural norm that discourages the public expression of negative viewpoints regarding sensitive matters pertaining to personal and familial life. Regarding the environmental domain, the majority of respondents were content with the state of their residences. Conversely, in the psychological domain, although the majority of respondents were content with themselves, a significant proportion reported experiencing negative emotions on a regular basis. One plausible explanation for the participants' contentment with their living conditions is that the majority of these residences receive financial support from the Ministry of National Guard Health Affairs as a component of the program.

Table 3 Logistic regression analysis for factors associated with the overall QOL and its sub-domains

Variable	Univariate OR [95% CI]	*p*	Multivariate OR [95% CI]	*p*
OVERALL QUALITY OF LIFE (ALL DOMAINS)				
Marital status:				
Single	1	–	1	–
Married	0.44[0.26–0.74]	.002	.516 [.293–.910]	.022
Disease name:				
Hypertension	1.73 [1.04–2.88]	.034	1.27[.56–2.90]	.567
Psychological problems	5.25 [1.93–14.25]	.001	5.95[1.98–17.93]	.002
CVA/Stroke	2.46 [1.37–4.41]	.003	2.10 [1.07–4.11]	.031
Number of illnesses	1.72 [1.34–2.21]	.000	1.47[.99–2.20]	.057
PHYSICAL HEALTH DOMAIN				
Education level:				
Literate	1	–	1	–
Illiterate	1.82 [1.09–3.03]	.029	1.92 [1.07–3.44]	.028
Disease name:				
Psychological problems	2.58 [1.10–6.07]	.030	4.53 [1.78–11.55]	.002
Stroke	2.76 [1.52–5.02]	.001	2.51[1.29–4.88]	.007
Number of illnesses	1.50 [1.178–1.91]	.001	1.23[0.93–1.61]	.161
PSYCHOLOGICAL WELL-BEING DOMAIN				
Age in years	1.02 [1.01–1.03]	.004	1.04[1.02–1.05]	< .001
Marital status:				
Single	1	–	1	–
Married	0.48[0.29–0.080]	.005	0.60, [0.33–1.09]	.095
Disease name:				
Hypertension	1.76 [1.06–2.92]	.030	1.75[0.70–4.35]	.230
Pulmonary disease	2.79[1.05–7.37]	.039	6.20[1.90–20.24]	.002
Psychological problems	4.27[1.67–10.88]	.002	23.47[6.05–91.12]	<.001
Stroke	2.57[1.43–4.61]	.002	2.98 [1.44–6.15]	.003
Number of illnesses	1.59 [1.25–2.04]	.000	0.98[0.64–1.51]	.939
SOCIAL RELATIONSHIPS DOMAIN				
Marital status:				
Single	1	–	1	–
Married	0.49[0.30–0.82]	.007	0.55[0.33–0.93]	.026
Disease name:				
Psychological problems	2.77[1.18–6.56]	.020	2.27[.94–5.45]	.068
ENVIRONMENTAL DOMAIN				
Age in years	1.02 [1.01–1.03]	.004	1.00[.99–1.02]	.840
Education level:				

Literate	1	–	1	–
Illiterate	2.39 [1.41–3.99]	.001	1.97 [1.13–3.746]	.017
Disease name:				
Diabetes	1.69[1.01–2.83]	.045	0.66 [0.35–1.69]	.515
Stroke	3.14[1.65–5.96]	.000	2.21 [1.10–4.40]	.027
Number of illnesses	1.51[1.18–1.93]	.001	1.37[0.93–2.00]	.108

Boldface figures show the only significant variables in final model of multivariate analysisThe benefits bundle for employees. Our study revealed that, in terms of overall scores, HHC patients are least satisfied with the quality of their physical health and psychological aspects of life, while being more satisfied with the quality of their social relationships and environment. The high quality of life scores observed in the domains of social relationships and environment are consistent with the results of a home health care study conducted in Turkey [20], which compared assisted living facility residents to patients residing in their own residences. Conversely, the results of our research diverge from those of studies examining the quality of life (QOL) of patients receiving home health care in the United States. The study findings indicated that the physical domain exhibited the highest mean score, while the social domain displayed the lowest [2]. This discrepancy may be largely attributable to differences in the healthcare settings and social cultures of the two studies; for instance, in Saudi Arabia, patients are expected to reside with their families, which is more consistent with the local culture and may provide greater social support.

Factors associated with QOL for HHC patients

The overall quality of life is significantly impacted by being married and having suffered a stroke, according to the findings of multivariate regression analysis. Furthermore, our findings revealed that psychological issues were substantial predictors of overall QOL. This finding aligns with the results of a study conducted in European countries to evaluate the quality of life (QOL) of dementia patients receiving HHC. The study revealed that the presence of depressive symptoms had a substantial negative impact on the overall QOL [22]. No correlation was observed between age, housing type, educational attainment, and overall quality of life (QOL). However, a study conducted in the Czech Republic that examined the QOL of older HHC clients revealed that younger, more educated individuals and those residing in shared houses exhibited a superior overall QOL in comparison to the other age groups and housing types. Potentially attributable to variations in the demographic and clinical characteristics of the study participants are these incongruous findings. Additionally, the Czech study demonstrated a significant correlation between morbid conditions and a diminished overall quality of life. This finding aligns with our own, which indicated a marginal correlation between the number of ailments experienced by the patients and their overall quality of life [23].

The quality of life (QOL) in the physical health domain was influenced by three factors at the domain level: educational attainment, psychological distress, and stroke experience. Consistent with the results of our study [6], a study conducted in China examining the impact of nurse-delivered home visits and telephone calls on medication adherence and quality of life revealed that a higher level of education is correlated with better medication adherence, which subsequently enhances physical QOL. Age and the presence of psychological issues emerged as the most significant predictors of quality of life in the domain of psychological health. Respiratory disease and stroke ranked subsequently in terms of predictive power. The substantial impact of age on psychological quality of life observed in our research contradicts the results of a study conducted in South Korea and the United States, which found that age is a predictor of physical health rather than psychological health [2, 24]. Cultural differences as well as variations in participant characteristics could account for these contradictory findings. In Saudi culture, the elderly typically reside with family members, from whom they anticipate the most emotional support; this may have a greater impact on their mental health than their physical health. Additionally, we discovered a correlation between psychological quality of life and pulmonary disease in our findings. This result is nearly consistent with the findings of a study that examined the quality of life of elderly nursing home residents with chronic respiratory disorders [18]: the results indicated a correlation between frequent coughing and the psychological domain.The results of our research indicated that marital status was significantly correlated with the quality of social aspects of life. In line with the findings of a study conducted in the United States that found a positive correlation between the number of individuals available for support and emotional and social quality of life [24], the study participants exhibited a high level of satisfaction with their personal relationships. However, our findings indicated that there was no correlation between age, type of accommodation, or level of education and the domain of social aspects. Within the environmental domain, stroke emerged as the primary predictor, with the patient's illness burden following suit.In summary, our research, along with prior findings, substantiated the notion that psychological issues and stroke are the primary determinants influencing the quality of life (QOL) of patients receiving home healthcare. Age, in particular, was found to have a significant impact on the psychological well-being of the

participants [17, 22, 23].

Study limitations and strengths

This is, to the best of our knowledge, the first study in Saudi Arabia to evaluate the quality of life (QOL) of HHC patients; this is a strength of the study, especially in light of the paucity of prior research on the same subject worldwide. Subsequent research has a substantial opportunity to expand upon the findings and evidence presented in this study. Due to the fact that the research was carried out in a single context, the findings might not be representative of the overall health conditions experienced by all HHC patients within the county. It exclusively represents individuals who are engaged in the HHC program of the Ministry of National Guard. It has been stated that while the WHOQOL-BREF questionnaire is a valid and reliable instrument overall, its reliability in assessing quality of life in the social domain is comparatively lower than that of other domains [14]. However, this study's findings pertaining to the social domain may have social desirability. Finally, this research was conducted at a single location and was cross-sectional, which may have restricted the applicability of the results. As a result, we advise that future research incorporate programs other than HHC in order to circumvent the design limitations of the present study. Due to the fact that QOL is a broad concept and research on this subject is scarce in the Middle East, additional research is required to acquire a deeper understanding of the various factors that influence QOL and to identify methods for controlling them in order to enhance it. This will contribute to improved QOL.

CONCLUSIONS AND IMPLICATIONS

The WHOQOL-BREF was utilized in this study to evaluate the physical, psychological, social, and environmental domains of QOL of HHC patients. As demonstrated by the fact that certain factors (e.g., psychological issues and stroke) influence more than one domain, we conclude that numerous factors influence QOL domains. It is the collective responsibility of healthcare providers, HHC program planners, and family caregivers to address these factors and comprehend their impact on quality of life. A number of these factors can be monitored and improved through the enhancement of HHC service quality, thereby augmenting patients' QOL. Enhancing the National Guard HHC program would enable it to deliver superior services through teams that are adequately trained.Our findings indicate that there are prospects for quality of life enhancement initiatives among patients receiving HHC. Such initiatives should prioritize the psychological health of patients, particularly those who have suffered a stroke. It is noteworthy to mention that while the social relationships of HHC patients appear to be of a satisfactory standard, indicating that the local social culture regards them as valuable family members deserving of support, this social culture should be preserved and promoted by healthcare providers and HHC program administrators. Furthermore, by improving the communication skills of HHC providers with care recipients and family caregivers, the quality of life among HHC patients could be enhanced. This would promote the well-being of HHC patients on both physical and psychological levels, while also encouraging them to adopt a person-centered care approach that involves their active participation in HHC plans and decision-making processes. Such a strategy would ultimately increase patient satisfaction and QOL [10]. Further investigation is warranted to identify and evaluate interventions that specifically aim to enhance the quality of life for patients receiving HHC.

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