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RESEARCH ARTICLE

QUALITY OF LIFE AND ASSOCIATED FACTORS AMONG PRIMARY HEALTH CARE PHYSICIANS, IN AL-AHSA, SAUDI ARABIA

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Abstract

Background: Primary health care (PHC) physicians play a crucial role in health systems. Their quality of life (QoL) impacts service provision and patient care. Evidence on QoL among PHC doctors in Saudi Arabia is limited.

Objective: This study aimed to assess QoL and associated factors among PHC physicians in the Al-Ahsa region of Saudi Arabia.

Methods: A cross-sectional study was conducted among **199** PHC physicians working in Ministry of Health centers in Al-Ahsa. Data were collected using a self-administered questionnaire including the WHOQOL-BREF scale and items on hypothesized QoL predictors. Descriptive analysis was conducted for QoL domain scores. ANOVA, t-tests and multiple linear regression were applied to examine variations and factors associated with overall QoL.

Results: The mean physical, psychological, social and environmental QoL domain scores ranged from 63.8-65.0 out of 100. Male physicians reported higher physical domain scores compared to females ($p=0.001$). Regional differences were observed, with Southern province physicians having highest psychological and social relationship scores ($p<0.05$). Physical health and environment were positively associated with overall QoL in regression analysis ($p\leq0.01$).

Conclusion: PHC physicians in Saudi Arabia have moderately positive QoL across domains, but gender and geographic variations exist. Improving workplace environment and promoting physician health are essential to enhance QoL. Multidimensional strategies are required to support PHC physicians.

Introduction:-

Primary health care (PHC) serves as the foundation of health systems around the world. The Declaration of Alma-Ata in 1978 highlighted the essential role of PHC in providing comprehensive, equitable, and affordable care to communities [1]. PHC encompasses illness prevention, health promotion, treatment of common diseases, and patient rehabilitation [2]. As the first point of contact with health services, PHC provides continuous person-centered care while coordinating referral to other levels of the system [3].

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PHC is delivered through multidisciplinary teams of health professionals. However, physicians constitute a major component of the PHC workforce [4]. Family physicians and general practitioners at PHC centers diagnose illnesses, prescribe medications, manage chronic diseases, and arrange referrals [5]. Physicians' competence and availability are critical in ensuring access to essential health services.

The COVID-19 pandemic has accentuated the significance of resilient PHC systems and the crucial role of PHC workers including physicians. Saudi Arabia has emphasized strengthening its PHC networks to fortify population health [6]. There are 2261 PHC centers in Saudi Arabia staffed by over 11,000 physicians. Ensuring the wellbeing of this workforce is vital for robust PHC delivery.

Quality of life (QoL) is defined by WHO as an individual's perceptions of their position in life in the context of their culture, value systems, goals, expectations, standards and concerns [7]. QoL is an important indicator of overall health, wellbeing and satisfaction. For physicians, QoL encompasses physical, mental, social and emotional health aspects related to both personal life and professional practice.

Enhancing QoL among healthcare providers has become an important priority given its impacts on quality of patient care. Research shows that poor physician QoL and burnout is associated with reduced professional effort, medical errors, lower patient adherence, and reduced patient satisfaction. Approximately 50% of US physicians experience substantial symptoms of burnout linked to emotional exhaustion, depersonalization, and lack of sense of personal accomplishment [8].

A myriad of factors relating to organizational environment and work conditions influence physician QoL [9]. Key factors include workload, scheduling, autonomy, compensation, resources, capabilities of support staff, and organizational culture [10]. Excessively long work hours and on-call duties can negatively affect QoL among PHC doctors . Lack of participation in decision-making also erodes physician wellbeing [11].

Work-life imbalance with inadequate quality time for self, family and leisure contributes to poor QoL . Office designs and availability of equipment and supplies also impact how physicians perceive their work environment. Furthermore, a lack of organizational support and poor supervisor relationships have been linked to lowered physician QoL . Harassment, discrimination and favoritism can exacerbate dissatisfaction and emotional exhaustion [12].

Strategies to enhance physician QoL should adopt a multidimensional approach addressing various organizational, professional and personal factors . Reducing administrative burdens, providing adequate ancillary staff, implementing flexible scheduling, and ensuring manageable workloads and autonomy are key [13]. Improving office environments, resource availability, and compensation also influences QoL .

Leadership training for physician supervisors, open communication channels, and transparency in policies are beneficial. Organized social activities, relaxation spaces, counseling services, and wellness programs facilitate social support and minimize stress [14]. Support for healthy behaviors including nutrition, exercise, and sleep contributes to better physical and mental health [15]. Integrating work-life balance policies allows physicians time for self-care and family. Providing development opportunities enhances professional engagement and meaning. Such multifaceted interventions to bolster physician QoL warrant greater attention.

Study Significance

This study would generate important insights regarding the QoL status among Saudi PHC physicians. The findings can guide interventions to enhance physician wellness and satisfaction by tackling vital organizational, social and environmental determinants. This has the potential to improve health workforce performance, productivity, retention and morale.

Ultimately, enhancing PHC physicians' QoL will positively impact the care experience for patients. Supported and satisfied physicians are able to deliver more holistic, compassionate and patient-centered care. Maintaining a healthy and stable PHC workforce is key to boosting health system capacity.

Thus, this study bears implications for Saudi Arabia's PHC system strengthening. Evidence on physicians' QoL provides impetus for healthcare organizations and policymakers to implement supportive working conditions for

PHC providers. This will enable meeting population healthcare needs, fulfilling care quality standards, and achieving universal health coverage aspirations. The study hence promises to make a substantive contribution to knowledge, practice and policy.

Research Objectives:-

- To evaluate QoL among PHC physicians in Al-Ahsa city of KSA**.**
- To identify and examine the factors associated with QoL among PHC physicians in Al Ahsa city.

Material and Methods:-

Study Design

This was a cross-sectional study conducted among primary health care (PHC) physicians working in Al-Ahsa region of Saudi Arabia.

Study Setting and Participants

The study setting comprised PHC centers affiliated with the Ministry of Health (MOH) in Al-Ahsa. There were over 60 PHC centers distributed across the four health sectors in the region.

The study participants included all physicians providing clinical services at MOH PHC centers in Al-Ahsa. Both general practitioners and family medicine specialists were recruited. Physicians engaged purely in administrative roles were excluded.

Sample Size

The sample size was calculated using the formula:
n = Z2P(1-P)/e2
Where,
n = required sample size Z = z statistic for level of confidence (1.96 for 95% confidence level) P = expected prevalence or proportion (0.5 used for maximum variability) e = margin of error/precision (0.05)

Applying this formula, the required minimum sample size with 95% confidence interval and 5% margin of error was:
n = (1.96)2 x 0.5(1 - 0.5)/(0.05)2
n = 384
Accounting for 10% non-response rate, the final sample size was **199** participants.

Sampling Technique

A probability sampling method was used to select the study participants. Primarily, stratified random sampling was applied to ensure proportionate representation of physicians across the four health sectors in Al-Ahsa. Each sector formed a stratum, and required number of participants were randomly sampled from each stratum.

Within each stratum, further clustering by PHC center was done for administrative feasibility. The number of participants recruited per center was proportional to physician staff size.

Data Collection

Data were collected using a structured self-administered questionnaire. The questionnaire had three sections:

1. Socio-demographic information: Details like age, gender, education, years of experience, marital status, sector, PHC center etc.
2. World Health Organization Quality of Life Instrument Short Version (WHOQOL-BREF): This is a validated 26-item tool that was used to assess quality of life across four domains - physical health, psychological health, social relationships, and environment. It also contains two stand-alone questions regarding overall QoL and general health.
3. Factors influencing QoL: Additional items captured data on hypothesized predictors of QoL like work hours, autonomy, burnout, organizational support, workload, work-life balance, remuneration etc.

The English questionnaire was translated to Arabic using standardized procedures. The questionnaire was converted into electronic format using Kobo Collect or Google Forms for online self-administration to the participants. Email invitations to participate with the survey link were sent to physicians at each selected PHC center.

Data Analysis
The collected data were exported from the online portal and analyzed using Statistical Package for Social Sciences (SPSS) version 25.0.

Descriptive statistics such as frequencies, percentages, means and standard deviations were calculated for socio-demographic variables and QoL domain scores.

Inferential statistics were applied to examine relationships and group differences. Independent sample t-test compared QoL domain scores by gender and other dichotomous variables. One-way ANOVA assessed variation in domain scores by sector, PHC center and other categorical predictors.

Multiple linear regression analysis was used to identify factors associated with overall QoL. Variables with $p \leq 0.25$ in bivariate analysis were entered into the regression model using stepwise method. Statistical significance was defined as $p<0.05$.

Ethical Considerations:
The study protocol was submitted for ethics approval from the Institutional Review Board of the College of Medicine, Al-Ahsa.Written informed consent was obtained from all participants prior to participation.Responses were kept confidential, and reporting did not identify any individuals.Participation in the study was voluntary with the right to withdraw at any time.Collected data were stored securely and accessible only to the research team.

Results:-

The questionnaire was distributed among study participants , initially the questionnaire was distributed for 220 participants , the response rate was 90 % so the final sample responded was 191 .

The table presents a comprehensive overview of the demographic and professional characteristics of the participants included in the study, which assesses the Quality of Life (QoL) among Primary Health Care (PHC) physicians. The sample consists of 199 physicians, with a slightly higher proportion of females (53.3%) compared to males (46.7%). Most of the participants are within the age range of 30-39 years (58.3%), indicating a relatively young cohort, with a notable decline in participants as age increases, particularly those over 40 years. The vast majority of participants are married (83.4%), suggesting that family responsibilities could be a significant factor in their lives.

In terms of education, nearly half of the participants hold a Bachelor's degree (49.7%), closely followed by those with a PhD (45.7%), and a small percentage have a Master's degree (4.5%). This distribution highlights a high level of educational attainment among the participants, with a significant emphasis on advanced degrees. Professionally, the group is predominantly comprised of General Practitioners (51.8%) and Family Medicine specialists (35.2%), with a smaller segment in fellowships (13.1%), reflecting a diverse range of expertise within primary health care.

Geographically, the participants are distributed across Saudi Arabia, with the largest representation from the Central Province (34.5%), followed by the Northern (24.2%), Southern (21.6%), and Eastern Provinces (19.6%). This geographic diversity ensures that the study's findings can potentially reflect the experiences of PHC physicians across different regions of the country.

Table 1:- Characteristics of the included participants.

Category	Subcategory	Number	Percentage
Sex	Male	93	46.7%
	Female	106	53.3%
Age	<30	59	29.6%
	30-39	116	58.3%
	40-49	20	10.1%
	50-59	4	2.0%

Marital Status	Single	28	14.1%
	Married	166	83.4%
	Divorced	5	2.5%
Education	Bachelor	99	49.7%
	Master	9	4.5%
	PhD	91	45.7%
Occupation	GP	103	51.8%
	Family Medicine	70	35.2%
	Fellowship	26	13.1%
Geographic Location	Eastern Province	38	19.6%
	Southern Province	42	21.6%
	Northern Province	47	24.2%
	Central Province	67	34.5%

Table 2 presents the distribution of responses to two key questions related to Quality of Life (QoL) and General Health among the study participants. For the overall QoL, a majority of respondents reported positive perceptions, with 40.7% rating their QoL as "Good" and 28.1% as "Very Good", indicating a generally favorable view of their own quality of life. Only a small fraction considered their QoL to be "Very Bad" (1.5%) or "Bad" (2.0%), while a notable portion, 27.6%, deemed it "It Is Ok", suggesting room for improvement or a neutral stance towards their overall life quality.

In terms of General Health, almost half of the respondents (49.7%) were "Satisfied", and an additional 20.6% were "Extremely Satisfied" with their health, reflecting a predominantly positive assessment of their general health status. However, a minority expressed dissatisfaction ("Not Satisfied Ever" at 2.0% and "Not Satisfied" at 12.6%), and 15.1% remained "Neutral", indicating neither satisfaction nor dissatisfaction with their health.

Table 2:- Responses to Q1 (Overall Quality of Life) and Q2 (General Health).

Category	Response	Number	Percentage
Overall QoL	Very Bad	3	1.5%
	Bad	4	2.0%
	It Is Ok	55	27.6%
	Good	81	40.7%
	Very Good	56	28.1%
General Health	Not Satisfied Ever	4	2.0%
	Not Satisfied	25	12.6%
	Neutral	30	15.1%
	Satisfied	99	49.7%
	Extremely Satisfied	41	20.6%

Table 3 presents the mean scores and standard deviations for the four domains of health and well-being among the study participants. The domains assessed are Physical Health, Psychological, Social Relationships, and Environment. The mean scores range narrowly from 63.80 to 65.03, indicating a relatively consistent level of perceived health and well-being across these dimensions. The Physical Health domain has a mean score of 64.36 with a standard deviation of 17.3, suggesting moderate variability in physical health perceptions among participants. The Psychological domain is slightly lower, with a mean of 63.80 and a standard deviation of 16.99, indicating a similar variability in psychological well-being. Social Relationships score slightly higher on average (65.03) but exhibit the highest variability among respondents, as indicated by the standard deviation of 21.33. Lastly, the Environment domain has a mean score of 63.94 and a standard deviation of 16.12, showing comparable perceptions of environmental factors to other domains.

Table 3:- Four Domains of Health and Well-being.

Domain	Mean	Standard Deviation (SD)
Physical Health	64.36	17.3
Psychological	63.80	16.99
Social Relationships	65.03	21.33
Environment	63.94	16.12

Table 4 illustrates the correlations between demographic factors and WHOQOL-BREF domains among primary health care physicians. The analysis includes data for physical health, psychological health, and social relationships domains, with demographic factors being sex and job location (Eastern, Southern, Northern, Central regions).

For the physical health domain, a significant difference is observed based on sex, with males reporting a higher mean score (68.587) compared to females (60.647), suggesting that male physicians perceive their physical health better than their female counterparts, as indicated by a p-value of 0.001.

In the psychological health domain, the job location shows varied mean scores, with physicians in the Southern region reporting the highest psychological well-being (70.540) and those in the Northern region the lowest (60.640). The p-value of 0.022 suggests significant differences in psychological health perceptions among physicians across different regions.

Social relationships also exhibit significant regional differences, with physicians in the Southern region again reporting the highest mean score (72.200) and those in the Central region the lowest (59.700). The p-value of 0.023 indicates significant variability in how social relationships are perceived by physicians based on their job location.

Table 4:- Correlation between Demographic Factors and WHOQOL-BREF Domains.

Demographic Factor	Domain	Category	N	Mean	Std. Deviation	p-value
Sex	Physical Health	Male	93	68.587	16.739	0.001
		Female	106	60.647	17.004	
Job Place	Psychological	Eastern	38	64.910	15.600	0.022
		Southern	42	70.540	15.650	
		Northern	47	60.640	18.890	
		Central	67	61.600	16.340	
	Social Relationships	Eastern	38	67.500	20.300	0.023
		Southern	42	72.200	16.110	
		Northern	47	64.180	22.380	
		Central	67	59.700	23.190	

Table 5 presents the results of a multiple linear regression analysis aimed at understanding the impact of various factors on the Overall Quality of Life (QoL) of individuals. The model includes four independent variables: Physical Health, Psychological Health, Social Relationships, and Environment, with an R^2 value of 0.444, indicating that approximately 44.4% of the variance in QoL scores can be explained by these variables.

The constant term in the regression equation is significant ($p < 0.001$) with a value of 1.481, suggesting a baseline level of QoL when all predictors are held at zero. Among the predictors, Physical Health and Environment show a positive and significant impact on QoL, with unstandardized coefficients of 0.015 ($p = 0.001$) and 0.017 ($p = 0.002$), respectively. This indicates that improvements in physical health and environmental conditions are associated with higher QoL scores. Psychological Health also shows a positive relationship with QoL, but its effect is not statistically significant ($p = 0.108$), suggesting that psychological factors may not have a strong influence on QoL in this model. Social Relationships have a negative coefficient (-0.001), but this relationship is not statistically significant ($p = 0.768$), indicating that the impact of social relationships on QoL is negligible within the context of this analysis.

The significance levels and confidence intervals for each coefficient provide further insights into the reliability of these relationships. Specifically, the positive and significant relationships for Physical Health and Environment underscore their importance in enhancing QoL, whereas the nonsignificant effects of Psychological Health and Social Relationships suggest that these areas may require further investigation or may be influenced by factors not captured in this model.

Table5:- Multiple Linear Regression on Overall Quality of Life (QoL).

Variable	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t-value	p-value	95% Confidence Interval	R^2

Constant	1.481	0.202		7.316	0.000	1.082 to 1.880	0.444
Physical Health	0.015	0.004	0.286	3.241	0.001	0.006 to 0.023	
Psychological	0.008	0.005	0.152	1.614	0.108	-0.002 to 0.017	
Social Relationships	-0.001	0.003	-0.022	-0.296	0.768	-0.007 to 0.005	
Environment	0.017	0.005	0.305	3.200	0.002	0.006 to 0.027	

Dependent Variable: Overall Quality of Life (QoL)

Table 6 presents the results of a multiple linear regression analysis focusing on the impact of various factors on General Health. The model, with an R^2 value of 0.470, indicates that approximately 47% of the variability in General Health can be explained by the variables included in the analysis. The constant term is statistically significant with a value of 1.034 and a p-value of less than 0.001, suggesting a base level of General Health when all predictors are at zero.

Physical Health and Psychological factors show positive and significant associations with General Health, with unstandardized coefficients (B) of 0.024 and 0.018, respectively, and both are significant at the 0.001 level. This indicates that improvements in these areas are associated with improvements in General Health. Physical Health, with the highest standardized coefficient (Beta) of 0.420, is the strongest predictor among the variables, followed by psychological factors with a Beta of 0.305.

Social Relationships exhibit a negative association with General Health, though this relationship is not statistically significant ($p = 0.058$), suggesting a marginal impact that needs further investigation. The Environment factor, while positive, is also not statistically significant ($p = 0.223$), indicating a minimal direct effect on General Health within this model.

Table 6:- Multiple Linear Regression on General Health.

Variable	**Unstandardized Coefficients (B)**	**Std. Error**	**Standardized Coefficients (Beta)**	**t-value**	**p-value**	**95% Confidence Interval**	**R^2**
Constant	1.034	0.223		4.640	0.000	1.082 to 1.880	0.470
Physical Health	0.024	0.005	0.420	4.875	0.000	0.014 to 0.034	
Psychological	0.018	0.005	0.305	3.332	0.001	0.007 to 0.028	
Social Relationships	-0.006	0.003	-0.138	-1.904	0.058	-0.013 to 0.000	
Environment	0.007	0.006	0.114	1.222	0.223	-0.004 to 0.018	

Dependent Variable: General Health

Discussion:-

This cross-sectional study aimed to assess the quality of life (QoL) and its associated factors among primary health care (PHC) physicians in Al-Ahsa, Saudi Arabia. The findings provide important insights into the QoL status and influencing factors among this population of health care providers.

Overall Quality of Life

The results revealed that the majority (68.8%) of PHC physicians rated their overall QoL as good or very good. This finding is consistent with previous studies that found generally positive QoL perceptions among physicians [16][17]. For example, a study of Chinese psychiatrists reported 66.5% having good or very good overall QoL [18]. However, the proportion of PHC physicians rating their QoL as good/very good in our study is lower compared to Chinese hospital physicians (87.5%) and Malaysian government doctors (89.4%) [19]. This discrepancy may be attributed to work-related stressors and challenges that are more prevalent in PHC settings [20].

Notably, 27.6% of participants rated their overall QoL as "neither poor nor good", suggesting room for improvement. This neutral stance has been observed in other physician groups as well. For instance, 27.4% of academic physicians in Egypt rated their QoL as "neither poor nor good" [21]. The underlying reasons for a moderate overall QoL perception need to be explored further. Potential factors may include high workload, insufficient compensation, lack of professional fulfillment, and absence of work-life balance.

Domains of Quality of Life

The four QoL domains assessed in this study, namely physical health, psychological health, social relationships, and environment, showed fairly similar mean scores in the moderate range of 63-65 out of 100. This indicates that PHC physicians' perceptions across these domains tend to be mediocre but not poor.

Among the domains, social relationships had the highest mean score while psychological health had the lowest. The higher social relationship satisfaction aligns with the predominantly married status of the physicians, which can provide better social and family support. However, research shows that physicians often struggle with maintaining personal relationships and experience loneliness due to their hectic schedules [22]. The lower psychological health scores suggest issues like stress, anxiety, and burnout may be eroding physicians' emotional well-being. Heavy workload, organizational pressures, and fear of medical errors can negatively impact doctors' mental health [23]

The study findings highlight the need to bolster PHC physicians' QoL across all four domains. Evidence-based organizational strategies to promote physicians' physical health could include providing gym facilities, healthy food options, and breaks for physical activity. Safeguarding mental health necessitates building a supportive work culture, implementing stress management programs, and ensuring reasonable workload. Enhancing social relationships requires flexibility in scheduling to allow quality time with family and friends [24]. Improving environmental QoL involves providing ergonomic workspaces, recreational spaces, and facilitated commute [25].

Factors Associated with Quality of Life

Our study found that male PHC physicians reported better physical health QoL compared to females. This may be attributable to women physicians facing greater demands from clinical workload as well as domestic responsibilities, resulting in higher stress and burnout [26]. Gender inequality and lack of support systems for women doctors have been reported as issues affecting their QoL and wellbeing [27]. Workplace policies promoting gender equity and supportive work-life integration are imperative.

Regional differences were observed in psychological and social relationships domains, with physicians in the Southern province reporting highest and Central province lowest mean scores. The distinct cultural and organizational climates across regions may influence physicians' emotional health and social circles. Further qualitative research can provide insights into the specific stressors and support systems affecting PHC physicians across geographic location. Our findings underline the importance of localized, context-specific initiatives to improve QoL rather than a one-size-fits-all approach.

The multiple regression analysis demonstrated that physical health and environment were positively associated with overall QoL. This highlights the crucial impact of physical well-being and surrounding conditions on physicians' quality of life[28]. Enabling healthy behaviors and providing pleasant, ergonomic work settings need to be prioritized by healthcare organizations to safeguard physicians' satisfaction. While psychological health showed a positive relationship as well, it was not statistically significant, indicating that individual emotional factors may not play a dominant role in influencing overall life quality perceptions.

For general health, physical health and psychological factors were most strongly and significantly associated. This underscores the close interlinkages between physical health, mental health, and general wellbeing. Chronic stress, burnout, and emotional exhaustion among physicians can manifest in psychosomatic symptoms and ill-health. Organizations must implement multidimensional strategies addressing both physical and psychological health to improve physicians' general wellness. Social relationships did not emerge as a significant factor, suggesting that physicians' health may be more affected by job-related than personal social factors[29].

Study Implications

This study provides valuable insights into an under-researched topic of QoL among PHC physicians in Saudi Arabia. The findings can inform policymakers to develop targeted strategies for enhancing physicians' wellbeing

and satisfaction. Our results highlight that while physicians have an above-average QoL, there is room for improvement across all health domains. Integrated policy initiatives are needed addressing the diverse physical, mental, social, and environmental factors impacting PHC doctors.

Establishing work-life balance should be a priority, given that excessive workload threatens physicians' QoL [30]. Reduced work hours, smart scheduling, and provision of ancillary staff can help prevent burnout. Improving organizational culture to promote camaraderie, teamwork, and physician autonomy is also essential. Dedicating resources for physicians' wellness through counseling, stress management, and mentoring programs will further aid QoL.

Our findings can guide healthcare organizations in formulating strategic objectives to enhance physician QoL through supportive working conditions. This will have downstream benefits in terms of improved patient care, safety, and satisfaction. Supporting PHC physicians is especially critical given the fundamental role of primary care for population health. Our results provide impetus for Saudi Arabia to invest in PHC doctors' wellbeing. This will ultimately strengthen the foundation of the healthcare system.

Limitations

Some limitations should be considered when interpreting the findings of this study. First, the self-reported cross-sectional nature provides insights at a single point in time but does not permit causal inferences. Longitudinal studies tracking QoL over time could establish temporality. Second, we assessed a range of factors related to QoL but not all influencing variables, such as income, leadership support, and organizational culture. Incorporating these parameters could enrich the analysis. Third, the study was conducted in one region of Saudi Arabia, which limits generalizability of findings to the entire PHC workforce. Larger national surveys of PHC physicians are warranted. Fourth, the use of standardized questionnaires poses risks of reporting bias. Mixed methods studies combining surveys with interviews may provide more nuanced perspectives.

Future Research Directions

This exploratory study sets the foundation for expanded research on physicians' QoL and wellness. Future studies can build on our findings by adopting a qualitative approach to gain deeper insights into physicians' lived experiences, perceptions, and attitudes related to QoL. Assessing a wider range of associated factors using more sophisticated analytical techniques such as structural equation modeling will advance understanding of relationships. Comparative analyses of QoL across physician specialties and healthcare sectors can also be illuminating. Long-term longitudinal studies will help evaluate the impact of interventions. Ensuring adequate female representation and examining gender differences should be a priority in light of our findings. Larger multicenter studies across Saudi Arabia are needed for more robust evidence to shape nationwide policies that promote physicians' wellbeing and satisfaction.

Conclusion:-

This study provides novel data regarding the quality of life and its associated factors among PHC physicians in Saudi Arabia. Although overall QoL perceptions were moderately positive, enhancements are needed across all health domains. Physical, psychological, and environmental factors emerged as significant influences on general health and QoL. The findings underscore the need for healthcare organizations to adopt a holistic approach in improving physicians' wellness. Nurturing PHC doctors' personal and professional well-being will strengthen the backbone of the healthcare system and enable the delivery of high quality, compassionate care. This study provides key insights to inform policies and interventions aimed at supporting physician QoL in Saudi Arabia

Disclosure

The author(s) report no conflicts of interest in this work.

Ethical Considerations

The study protocol was submitted for ethics approval from the Institutional Review Board of the College of Medicine, Al-Ahsa.Written informed consent was obtained from all participants prior to participation.Responses were kept confidential, and reporting did not identify any individuals.Participation in the study was voluntary with the right to withdraw at any time.Collected data were stored securely and accessible only to the research team.

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