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Roles of Emotional Reactivity, Risk Perception and Gender in Health-related Quality of Life among Hypertensive Patients in Akwa Ibom State, Nigeria

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ABSTRACT

Hypertension is a chronic condition associated with significant physical and psychological burdens, yet the psychosocial factors influencing the health-related quality of life (HRQoL) among hypertensive patients remain underexplored in Nigeria. While emotional reactivity and risk perception have been shown to affect health outcomes in various populations, their specific roles in the HRQoL of hypertensive individuals in sub-Saharan Africa are not well understood.This study investigated the roles of emotional reactivity, risk perception, and gender on health-related quality of life (HRQoL) among 226 hypertensive patients in Akwa Ibom State, Nigeria. Participants were drawn from four hospitals, representing government, missionary, and private facilities. The sample comprised 124 males and 102 females, aged 26 to 72 years, with a mean age of 59.36 years ($SD = 8.74$). Data were collected using the Perth Emotional Reactivity Scale, SF-36 Health-Related Quality of Life Questionnaire, and Risk Attitude Scale. A cross-sectional research design was employed, and hierarchical multiple regression analysis was used to analyze the data. Findings revealed that emotional reactivity significantly predicted HRQoL ($\beta = .31$, $p < .001$). However, risk perception as did risk perception and gender were not significant predictors of HRQoL. These results highlight the critical roles of emotional reactivity in HRQoL among hypertensive patients. It is recommended that healthcare providers develop tailored interventions to help hypertensive patients manage emotional reactivity. Psychoeducational programs and counseling services should be integrated into hypertension management to enhance patients' emotional functioning and promote better health outcomes.

Introduction

Hypertension, a chronic medical condition characterized by elevated blood pressure, is a major public health concern globally, affecting millions, and it is a primary risk factor for cardiovascular diseases, kidney failure, and other critical health issues (World Health Organization [WHO], 2023). In addition to the physical symptoms of hypertension, the condition can severely impact an individual's health-related quality of life (HRQoL), affecting their mental, physical, and social well-being (Kandasamy, et al., 2025). HRQoL refers to an individual's or group's perceived physical and mental health over time (Bukavina et al., 2017). According to Karimi and Brazier (2016) defined HRQOL as an individual's satisfaction or happiness with domains of life so far as they affect or are affected by health. HRQoL and its determinants have evolved since the 1980s to encompass those aspects of overall quality of life that can be clearly shown to affect health, either physical or mental (Higuita-Gutiérrez & Cardona-Arias, 2025).

Leading health organizations such as the Center for Disease Control and Prevention and the World Health Organization (2007) have identified HRQoL as a goal for all people across all life stages, that is, quality of life relative to one's health or disease status, is a concern of policymakers, researchers, and health care practitioners (Sischo & Broder, 2011) and its research priorities are usually aligned with the needs and values of patients and their families. Therefore, HRQoL is a multi-dimensional concept that includes physical, mental, emotional and social domains. It goes beyond direct measures of population health, life expectancies and causes of death to include the impact health status have on quality of life (Kaplan & Hays, 2022). Hence, HRQOL can be distinguished from quality of life in that HRQOL is concerned primarily with those factors that fall under the purview of health care providers and health care-systems (Karimi &Brazierm, 2016).

In assessing HRQOL researchers try to examine how variables within the health domain (e.g., a disease or its treatment)

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relate to particular facets of life that have been held to be important to people in general (generic HRQOL) or to people who have a specific disease (condition-specific HRQOL)(Lin et al., 2013). Most definitions of HRQOL usually include symptoms, health perceptions, and overall quality of life and they stress the impacts of disease on physical, social/role, psychological/emotional, and cognitive functioning (Onu et al., 2023). Individuals' HRQOL gives a broader view of their physical, psychological, and social functioning (Krawczyk-Suszek&Kleinrok, 2025). This makes HRQoL to be a primary measure of the effect of disease (Al Salmi et al., 2021; Khajehpoor et al., 2021). Also, it can often be used more easily than clinical parameters as a health-related index, helping healthcare workers to understand patients' needs and provide them with quality health services (Hannawa et al., 2022). In recent years, HRQoL has been studied extensively in populations with cancer, stroke, cardiovascular disease, and other chronic diseases using different methods and the present study is one of such studies (Akbari Sari et al., 2021; Ahmed et al., 2023).

The hierarchy of needs theory by Maslow in 1962 was adopted as the model for HRQOL in this study. This is an existentialistic theory of self-actualization rooted in personal growth. When people take responsibility for their own lives, they put more of the virtues they have into use, and this make them to become more free, powerful, happy, and healthy (Prilleltensky & Prilleltensky, 2021). Maslow's concept of self-actualization seems relevant in modern medicine as most chronic diseases persist despite the best biomedical treatments (Hoffman, 2020). Perhaps, the real change patients need in coping is understanding and living the noble path of personal development. According to Maslow, one must go through the eight needs starting from the concrete and physiological to the abstract and divine, or transcendence (Papaleontiou-Louca et al., 2023). For one to fulfill the needs serially, one must develop oneself to be more spontaneous, independent, active, and responsible.

Maslow's hierarchy of needs suggests that individuals must satisfy both basic and higher-order psychological needs to attain overall well-being, including health-related quality of life (HRQoL). Emotional reactivity, risk perception, and gender may influence how individuals perceive and respond to health challenges, thereby affecting their HRQoL. Guided by this theoretical framework, the present study investigates the extent to which emotional reactivity, risk perception, and gender predict HRQoL among hypertensive patients.

Emotional reactivity refers to the emotional response to an event that may vary between individuals in terms of intensity and the speed at which it reaches the peak and returns from this peak back to baseline (Water et al., 2010; Tan et al., 2023). It denotes proneness toward readily entering into and sustaining a state of emotional arousal in response to emotional events (Becerra & Campitelli, 2013). In terms of cognitive self -regulation theory(Bandura, 1986), emotional reactivity signifies a reported inefficacy in self-regulating thoughts and images and the resultant emotions in anticipation of, during, and following emotional events. Difficulties with one's emotional response can impair functioning and contribute to the development of psychopathology (Cole, 2015).

This study is anchored on Lazarus and Folkman (1984)'s Cognitive Appraisal Theory of Stress and Coping, which explains how individuals cognitively evaluate (appraise) stressors and choose coping strategies that affect their emotional and physical well-being. Emotional reactivity plays a key role in how stress is appraised whether as a threat or manageable challenge and consequently influences coping responses. Individuals with high emotional reactivity may perceive situations as more threatening and engage in less effective coping, which can negatively impact their health-related quality of life. This framework is therefore appropriate for understanding how emotional and cognitive factors interact to shape well-being among hypertensive patients.

Emotional reactivity has been increasingly recognized as a significant factor influencing individuals' quality of life (QoL), particularly in the context of health-related outcomes. Research indicates that heightened emotional reactivity characterized by intense and prolonged responses to stressors can negatively affect both psychological and physical well-being, thereby diminishing overall HRQoL (Piazza et al. 2013; Rickenbachet al., 2015). For instance, individuals with greater emotional reactivity tend to report lower life satisfaction and poorer health perceptions, even in non-clinical populations (Yartz et al., 2005). More recent evidence supports that high emotional reactivity has been associated with reduced QoL in populations managing chronic illnesses (Guasch et al., 2019), heightened distress and lower life satisfaction in adolescents (Chiang et al., 2023), and decreased HRQoL in adults facing workplace stress or interpersonal conflict (Cornelius et al., 2018). These findings suggest that emotional reactivity may serve as a direct predictor of reduced QoL, independent of clinical diagnoses such as anxiety or depression. As such, understanding emotional reactivity offers valuable insight into individual differences in perceived quality of life, particularly in challenging or health-compromised environments.

Another variable which may influence health related quality of life is risk perception, which is the subjective judgment that people make about the characteristics and severity of a risk (Ferreret al., 2015). Although the phrase is most commonly used in reference to natural hazards and threats to the environment or health, the severity of risk perception has also been linked to health-related problems (Carducci et al., 2019; Dvir et al., 2024). The psychological investigation of risk perception began with studies that investigated how people process information (Siegrist & Árvai, 2020; Ferrer & Klein, 2015; Siegrist & Árvai, 2020). These early works maintained that people use cognitive heuristics in sorting and

simplifying information which led to biases in comprehension (Tversky & Kahneman, 1974; Kahneman, 2011). Later work built on this foundation and became the psychometric paradigm. This approach identifies numerous factors responsible for influencing individuals' perceptions of risk, including dread, newness, stigma, and other factors (Tversky & Kahneman, 1974).

The theoretical model linking risk perception with HRQOL is the Protection Motivation Theory (PMT) by Becker and Maiman in 1975, which postulates that people are more likely to protect themselves when they envisage negative outcomes, have the desire to avoid them and feel they are capable of protecting themselves. Generally, the PMT posits that there is a relationship between risk perception and injuries; and that people take protective action when they are motivated and have the means to do so(Rogers, 1974; Milne et al., 2000). People may be less tolerant of risks imposed on them by others than those risks they choose to take for themselves, which implies that helping people recognize the consequences their actions could impose on others is one way to lead them away from high-risk behaviour and be motivated to protect themselves and others. Generally, this theory states that being motivated to protect oneself requires not only adequate risk perception, but also the tools and skills to take preventive action (Martin et al., 2007). Those who are more likely to take risks tend to be less aware of risks and lack the self-efficacy or means to protect themselves.

The proposition that perceived risk is associated with mental and physical health is consistent with existing conceptual models of quality of life (Lindell & Perry, 2012). Some studies (e.g., Hawleyet al., 2017; Calderon et al., 2022) found that high perceived risk of cancer recurrence at study baseline was associated with increased anxiety six months later. Studies reported that cancer-specific distress was higher among people with higher perceived risk of developing lung cancer (Grenenet al., 2016; Lebrett et al.,2022) or breast cancer (Gibbonset al.,2016; Ng et al.,2017) than among those with lower risk perceptions. However, none of the studies reported the relationship between perceived risk and HRQoL. The single study that examined the relationship found that perceived risk of developing lung cancer was not associated with physical HRQoL among healthy people (Bunge et al., 2008). However, findings from the cardiovascular literature differ. In one study, men who perceived themselves to be at high risk of having a heart attack were at increased risk of death from cardiovascular disease, even after controlling for actual cardiovascular disease risk (Homko et al.,2008).

Regarding gender and HRQOL, men tend to be more proactive in trying to modify their environment when confronted with significant challenges, such as health problems (Wang et al.,2022; Buttery et al.,2021). Similarly, Hanet al., (2010) reported significant gender differences in HRQOL on Idiopathic Pulmonary Fibrosis. As compared to women, men had worse physical HRQOL scores, but better mental HRQOL scores(Hans et al., 2010). Chooet al. (2014) investigated gender differences in HRQOL associated with abdominal obesity in a Korean population and findings indicated that among the components of physical HRQOL, metabolic syndrome components including waist circumference, triglycerides, high density lipoprotein cholesterol, fasting blood sugar, systolic blood pressure (SBP) and diastolic blood pressure (DBP) mostly deteriorated bodily pain and physical functioning in women.

However, despite these findings, there remains a gap in understanding how emotional and psychological factors, including emotional reactivity and coping styles, interact with gender to influence HRQOL across diverse populations. Most existing studies focus on biomedical markers, leaving psychosocial dimensions underexplored. Additionally, limited research has examined whether these gender-related patterns hold across different cultural contexts or among younger, non-clinical populations. Addressing this gap is essential for developing gender-sensitive interventions that holistically improve HRQOL.

HRQoLis a vital component in the care of hypertensive patients and a longer life expectancy or survival time is not always the primary desired outcome for ill individuals. Therefore, it is important to distinguish what does and what does not contribute to a significant or better HRQOL. Increased understanding of the determinants of HRQoL can improve the management of hypertensive patients. Thisstudy hypothesized that: (1) Emotional reactivity will significantly predict HRQoL among hypertensive patients. (2) Risk perception will significantly predict HRQoL among hypertensive patients. (3) Gender will significantly predict HRQoL among hypertensive patients.

Method

Participants

Participants in this study comprised 226 hypertensive patients (124 males, 102 females) drawn from the following hospitals in Akwa Ibom State: University of Uyo Teaching Hospital (UUTH) Uyo (n = 166), St. Luke's Hospital, AnuaUyo (n = 38), General Hospital Ikot Ekpene(n = 9) and Our Lady of Lourdes Hospital, Uyo (n = 13). Their ages ranged from 26 to 72 years with a mean age of 59.36 years (SD = 11.5). In terms of religion, 186 were Christians, 24 Moslems, 12 Traditional worshippers while 4 indicated other religions. By marital status, 13 of them were singles, 196 were married, 10 were separated and 7 were divorced.

Instruments

Three instruments - the Perth Emotional Reactivity Scale, health and safety risk perception subscale of the Domain Specific Risk Attitude Scale, and the HRQoL Questionnaire were used in this

study. The instruments were divided into four sections, A, B, C, and D. Section A tapped the demographic information of participants such as gender, age, religion, marital status and presence of comorbidity in patients.

Section B was the Perth Emotional Reactivity Scale (PERS) developed by Beccerra and Camptelli (2013). The PERS originally had 30 items but revalidation by the researchers yielded 19 valid items. The items are arranged in a 5-point Likert scale format as follows: 1 = *very unlike me, 2= somewhat unlike me, 3 = neither like or unlike me, 4 = somewhat like me,* and *5 = very like me*. Positively worded items were directly scored, while negatively worded items were reverse scored. Total scale scores can be calculated by summing all items. Higher scores suggest high emotional reactivity while lower scores indicate low emotional reactivity. The revalidation by the present researchers for the present study yielded a Cronbach's α coefficient of .80.

Section C was made up of five items from the health and safety risk perception subscale of the Domain Specific Risk Attitude Scale developed by Weber et al.(2002). Items are rated in a 5-point Likert scale format as follows: 1='Extreme unlikely,2= Unlikely, 3 = Not sure, 4 = Likely, and 5= Extreme likely. Total scale scores can be calculated by summing all items. Scores 10.43 and higher suggest high risk perception while scores lower than 10.43 indicate low risk perception. The revalidation work by the researchers also yielded a Cronbach'sα coefficient of .67 for the scale.

Section D was the SF-36 HRQoL Questionnaire developed by WareJr and Sherbourne (1992). This scale consists of 4 items arranged in a 5-point Likert scale such as 1= Not a very happy person, 2= 'Not a happy person', 3= 'Neutral, 4= A happy person, and 5= A very happy person. Total scale scores can be calculated by summing all items. Higher scores suggest positive health related quality of life while lower scores suggest negative HRQoL. The present researchers obtained a Cronbach'sα co-efficient of .89 for the scale.

Procedure

The instruments were administered by the second author, who first sought and obtained approval by the authorities of the hospitals. The participants were then approached individually with the aid of nurses whose assistance was implored to adequately identify hypertensive patients and mark their folder numbers to avoid a patient filling the questionnaire on two different occasions. Patients were then approached individually by the second researcher, who sought their informed consent, voluntary involvement and sincerity in responding to the items and assured them of the confidentiality of the information they provided. Two hundred and fifty (250) copies of the questionnaires were distributed to the participants, but 229 copies were retrieved out of which three (3) copies were discarded because of incomplete data by the participants. Thus, 226 copies of the questionnaires were used for data analysis representing 90.4% response rate.

Design/Statistics

The study adopted a cross-sectional survey design while a stepwisemultiple regression analysis was used for data analysis.

Results

Data Analysis was performed using the Statistical Package for the Social Sciences (SPSS) version 20 and the results of the findings of this study are presented below. The correlations of the demographic variables and study variables are shown in Table 1, while findings of the regression analysis are in Table 2.

Table 1: Correlations of demographic variables, emotional reactivity, risk perception and HRQoL

	Variables	1	2	3	4	5
1	Gender	-				
2	Age	-.25**	-			
3	Comorbidity (One or more chronic illness)	.03	.21*	-		
4	Emotional reactivity	.14*	-.00	.011	-	
5	Risk perception	-.11	.09	.08	-.14	-
6	HRQoL	.18*	.05	-.01	-.31*	-.0.2

Note*** $p < .001$; ** $p < .01$; * $p < .05$

In Table 1, the correlations showed that gender was negatively associated with age but positively associated with emotional reactivity and HRQOL. Age was associated with comorbidity, but not related to HRQOL. Comorbidity was not associated with HRQOL whereas emotional reactivity was negatively associated with HRQOL (but not related to risk perception. Risk perception was also not associated with HRQOL.

Table 2: Hierarchical multiple regression predicting HRQoL by Emotional reactivity, Risk perception and Gender

Predictors	Step 1			Step 2			Step 3		
	B	.	***t***	***B***	**β**	***t***	***B***	**β**	***t***
Emotional reactivity	.08	.31	7.79***	.77	.31	4.86***	.07	.30	4.60***
Risk perception				.02	.30	.41	.30	.40	.80
Gender							.71	.13	1.96
R^2	.10			.10			.11		
ΔR^2	.10			.00			.02		
F	23.62 (1, 224)***			11.81(2, 223)***			9.24 (3,222)***		
ΔF	23.62 (1, 224)***			.17(1, 223)			3.82 (1, 222)		

**$p < .01$; ***$p < .001$; ΔR^2 = Change in R^2; ΔF = Change in *F*.

Results of the hierarchical multiple regression for the test of the hypotheses is shown in Table 2. Emotional reactivity was added in the Step 1 of the regression analysis, and it significantly predicted HRQoL, β =.31, *t* (224) = 7.79, *p*<.001. The unstandardized regression coefficient (*B*) showed that every one unit rise in emotional reactivity was associated with .38 deficits in HRQoL among hypertensive patients. The contribution of emotional reactivity in explaining the variance in HRQoL was 10% (R^2 = .10), and *F* statistics of the model was significant, *F* (1, 224) = 23.62, *p*<.001.

In step 2, risk perception did not significantly predict HRQoL, β = .30, *t* (223) = .41. The unstandardized regression coefficient (*B*) showed that each one unit rise in risk perception was associated with .31 increases in HRQoL among hypertensive patients.

Step 3 indicated that gender did not significantly predict HRQoL among hypertensive patients, *β* = -13 *t* (222) = 1.96. The contribution of gender in explaining the variance in HRQoL among hypertensive patients was 2% (R^2 change = .11), and the *F* change was not significant (1,222) = 3.82.

Discussion

The objective of the study was to investigate the roles of emotional reactivity, risk perception, and gender on health-related quality of life (HRQoL) among hypertensive patients in Akwa Ibom State, Nigeria.The result of the study revealed that emotional reactivity significantly predicted HRQoL, thereby supporting the first hypothesis which stated that emotional reactivity would significantly predict HRQoL among hypertensive patients. This suggests that individuals who are more emotionally reactive are likely to report poorer quality of life. This finding that individuals with high emotional reactivity reported better quality of life may seem counterintuitive, given that emotional reactivity is often linked to vulnerability or stress.

However, despite the evidence that emotional reactivity is often associated with psychological vulnerability, the current finding suggest that it may also serve adaptive functions, especially when coupled with effective emotion regulation and social support (Aliche et al., 2020; Lopez et al., 2025; Pei et al., 2023). Some emotionally reactive individuals may have developed adaptive emotion regulation skills (e.g., mindfulness, cognitive reappraisal). They feel emotions deeply, but manage them effectively, using emotions as valuable signals for making meaningful choices or pursuing valued goals. High emotional reactivity may reflect greater emotional engagement with life, relationships, and daily experiences. These individuals may feel more connected and alive, which contributes to a richer, more fulfilling quality of life. Future research among hypertensive patients is needed to understand the interplay between reactivity, regulation, and context to clarify these relationships.

The second result also showed that risk perception did not significantly predict HRQoL among hypertensive patients. Hence, the second hypothesis which stated that risk perception would significantly predict HRQoL among hypertensive patients was rejected. This finding is contrary to the findings of prior research suggesting that lower perceived health risks are often associated with more favorable HRQoL outcomes (e.g., Miaskowski et al., 2007; Water et al., 2010; Foxwell et al., 2013; Jennings et al., 2023; Retèl et al., 2013). However, Evangelista et al. (2003)found no

significant relationship between perceived risk of lung cancer and physical HRQoL among healthy individuals. These inconsistencies suggest that the impact of perceived risk on HRQoL may depend on factors such as population type, health condition, and the distinction between physical and emotional aspects of quality of life.

A possible rationale for the observed non-significant relationship between risk perception and HRQoL in hypertensive patients lies in the complex and multifactorial nature of quality of life. HRQoL is influenced not only by cognitive appraisals of health risk but also by physical symptoms, emotional well-being, treatment side effects, socio-economic conditions, and access to healthcare. While risk perception may drive preventive behaviours, it does not necessarily translate into an improved sense of well-being especially if it triggers anxiety or worry, which can diminish mental health. Moreover, in chronic conditions like hypertension, individuals may experience "risk fatigue," where continuous exposure to health warnings normalizes their perceived vulnerability, thereby weakening its impact on their quality of life. Patients may cognitively acknowledge the risk yet adapt emotionally, leading to a disconnect between perceived risk and HRQoL.

The finding that risk perception does not significantly predict HRQoL among hypertensive patients implies that simply increasing awareness or perceived vulnerability may not directly enhance quality of life in this population. Instead, HRQoL appears to be shaped more by other tangible factors. This suggests that public health strategies focusing solely on risk communication may be insufficient in improving patient well-being unless they are coupled with interventions that address broader psychological and social determinants of health. It is recommended that healthcare providers and policymakers adopt a more holistic approach in hypertension management by integrating psychosocial support, patient education, and individualized care rather than relying solely on risk-based messaging.

The third finding of this study was that gender was not a significant predictor of HRQoL among hypertensive patients. Therefore, the third hypothesis which gender would significantly predict HRQoL among hypertensive patients was not supported. This finding contradicts several earlier empirical studies that found gender differences in HRQoL across various chronic conditions (e.g., Wang et al., 2022; Buttery et al., 2021; Han et al., 2010; Choo et al., 2014). A possible rationale for this finding lies in the evolving nature of gender roles, health perceptions, and access to healthcare, particularly in chronic illness management. Although gender differences have historically been associated with variations in health outcomes and psychosocial functioning, these disparities may be diminishing in certain populations due to increased health awareness, education, and equitable access to medical care. Among hypertensive patients, both men and women are often equally exposed to health information and treatment protocols, especially in structured clinical settings. As a result, the differences in health-related quality of life (HRQoL) that might have once been attributed to gender-specific coping styles or help-seeking behaviours may now be mitigated by standardized treatment interventions and support systems.

The finding on lack of gender differences in quality of life implies that interventions aimed at improving HRQoL in hypertensive populations should be designed to target all patients uniformly, rather than being differentiated solely based on gender. It also points to the growing importance of considering other individualized factors such as psychological traits, lifestyle, and socio-economic status over demographic characteristics like sex. Therefore, healthcare practitioners and policymakers should focus on tailoring hypertension management strategies based on patient-specific needs rather than gender-based assumptions. While gender-sensitive health education remains important in broader public health, interventions to enhance HRQoL among hypertensive individuals should prioritize emotional, behavioural, and contextual factors that affect both men and women equally.

Limitations of the Study and suggestions for further studies

The participants used in the study were only drawn from few hospitals which made the sample to be small to warrant safe generalization. Another limitation that resulted in the small sample size was that some of the volunteers were illiterates and only literate persons participated in this study. Financial impediments also posed a big problem as this accounts for the reason the study could not be carried out in other hospitals across the southern region of Nigeria. Given the limited sample size and geographic scope of the current study, future research should consider using a larger and more diverse population drawn from multiple hospitals and communities across the southern Nigeria. This would enhance the generalizability of findings and provide a more comprehensive understanding of the relationship between emotional reactivity, risk perception, gender, and HRQoL among hypertensive patients. Additionally, future studies should include both literate and illiterate participants by adopting appropriately translated tools for data collection to ensure inclusivity and representation. Researchers are also encouraged to explore the influence of cultural beliefs, social support systems, and healthcare accessibility on HRQoL, using mixed methods approaches where feasible. Finally, with adequate funding, multi-site and longitudinal studies can offer deeper insights into how psychological and demographic factors affect HRQoL over time in hypertensive populations.

Conclusion

This study set out to examine the roles of emotional reactivity, risk perception, and gender in predicting health-related quality of life (HRQoL) among hypertensive patients in Akwa Ibom

State, Nigeria. Contrary to the expectations, the result showed that hypertensive patients with high emotional reactivity reported better quality of life. Although there was no measurement of emotion regulation skills in the present study, some emotionally reactive individuals in the current study may have developed adaptive emotion regulation skills that helped them to manage their well-being and have better quality of life. In contrast, risk perception did not significantly predict HRQoL among the participants. This suggests that simply perceiving a high or low level of health risk may not directly influence one's well-being, particularly in the context of chronic conditions where ongoing symptoms, emotional resilience, and socio-economic conditions play a more dominant role. Health education efforts focused solely on increasing perceived risk may be inadequate unless paired with interventions that address emotional coping, support systems, and access to care.

Furthermore, gender was found not to be a significant predictor of HRQoL among hypertensive patients. This challenges traditional assumptions that men and women experience and manage chronic illnesses differently in terms of quality of life. The result suggests that contemporary factors such as improved health literacy, equitable access to care, and standardized treatment approaches may have reduced gender-based disparities in HRQoL within this population. In sum, the findings underscore the importance of prioritizing individual psychological and contextual variables over general demographic assumptions in hypertension management. Future interventions should be comprehensive, person-centered, and include emotional health components to improve overall patient outcomes and quality of life.

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