Original Article

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The Effects of Subjective Socioeconomic Status and Social Capital on Self-rated Health and Perceived Quality of Life: A Cross-sectional Survey-based Study in a Minority Group in Iran

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Objectives: The purpose of this study is to examine the impact of subjective socioeconomic status and social capital on self-rated health and quality of life among a minority group in Iran.

Methods: This cross-sectional study involved 800 individuals from a minority group in Iran. The sampling method was clustering, and data collection was conducted using a questionnaire. Data analysis was performed using SPSS version 18 and Stata version 8.

Results: The results of logistic regression analysis revealed that subjective socioeconomic status (odds ratio [OR], 1.47; 95% confidence interval [CI], 1.34 to 1.61), belonging and empathy (OR, 1.09; 95% CI, 1.03 to 1.15), and trust (OR, 1.06; 95% CI, 1.00 to 1.13) significantly impacted the quality of life. Additionally, the logistic regression analysis for factors influencing self–rated health demonstrated significant effects for the age group of 31-50 years (OR, 0.59; 95% CI, 0.38 to 0.91), gender (OR, 0.65; 95% CI, 0.46 to 0.92), academic education (OR, 2.00; 95% CI, 1.22 to 3.26), subjective socioeconomic status (OR, 1.27; 95% CI, 1.16 to 1.38), chronic disease (OR, 4.52; 95% CI, 2.49 to 8.19), belonging and empathy (OR, 1.06; 95% CI, 1.01 to 1.11), and participation (OR, 1.12; 95% CI, 1.00 to 1.24).

Conclusions: The findings indicate that bonding social capital significantly influences health levels and quality of life. Focusing on delegating local responsibilities to community members and striving to promote participation in health programs, along with increasing the socioeconomic status of minority groups, can effectively improve their health and quality of life.

Key words: Quality of life, Trust, Social class, Social structure, Health

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INTRODUCTION

Health and illness are not solely biological phenomena; cultural and social factors significantly influence their construction and shaping [1]. In essence, the concepts of health and illness are embedded within the social values of human society [2]. The social contexts in which individuals find themselves are the most significant predictors of their health, illness, and quality of life (QoL) [3]. Therefore, it is crucial to identify the social effects on health and QoL.

Gotay and Moor [4] defined QoL as a term encompassing the ability to perform everyday activities which reflects physical psychological, and social well-being and patient satisfaction with levels of functioning. QoL is a multifaceted concept that reflects people's happiness and well-being [5]. It can be understood through two dimensions: objective and subjective. The subjective dimension of QoL is assessed using survey tools and interviews, which evaluate individuals' life experiences in terms of satisfaction, happiness, and well-being [6]. Self-rated health (SRH) serves as a meaningful and subjective indicator of health status. It represents a novel assessment method based on an individual's evaluation of their own health, covering overall functioning and the physical, mental, and social dimensions of health. The SRH index has gained widespread use in recent years and has been demonstrated to correlate with life satisfaction and well-being [7].

Given the complexity of the concepts of health and QoL, it is clear that discussions about their influences must transcend individualistic paradigms and emphasize the various situational and structural factors that impact health-related behaviors. Therefore, it can be argued that the structural system provides diverse resources related to health, from which individuals can benefit to improve their QoL [8].

One of these social and structural factors is the concept of social capital (SC). SC has emerged as a compelling concept in the social sciences, attracting significant attention in public health studies [9]. SC provides a powerful framework for understanding how to better implement health interventions and ensure the widespread expansion of health services for all members of the community [10]. Social cohesion, trust, and mutual respect within a society contribute to the protection of individuals' health. Communities experiencing higher levels of income inequality tend to exhibit less social cohesion, higher crime rates, and increased mortality rates [11]. A review study conducted in Iran in 2020 also demonstrated that an increase in SC leads to improved health outcomes for women. Thus, through social participation, trust, and connections with family and friends, access to welfare, health, and education facilities is improved, ultimately enhancing women's health [12].

The main argument of this article is based on two key ideas. First, proponents argue that a critical missing element in the history of health studies is determining whether it is possible to assess the QoL and SRH of individuals without considering social criteria [13]. Second, having access to data on the health status and QoL of various population groups is essential. This

data can serve as foundational information for numerous health assessments and policies aimed at enhancing health and reducing disparities in this area. There are numerous studies on SC and various health dimensions (physical, mental, social, and environmental). However, research focusing on the impact of SC on SRH and perceived QoL among minority groups—particularly those defined by ethnicity, language, and religion in Iran—is scarce both domestically and internationally [14-16]. The challenges these minority groups face, such as migration, housing, experiences of racism and discrimination, poverty, and adverse environmental conditions, may adversely affect their health [16]. According to a study by Ehsan et al. [17] in 2019, future research could benefit from conceptualizing the relationship between SC and health in terms of what, who, where, when, why, and how . Therefore, this study aimed to examine the impact of subjective socioeconomic status (SSS) and SC on SRH and perceived QoL among a minority group in western Iran.

METHODS

Study Design and Participants

This cross-sectional study was conducted in 3 western provinces (Ilam, Kermanshah, and Kurdistan) in Iran in 2019. The study focused on ethnic minorities, who collectively constitute around half of Iran's population. Specifically, it included Kurds, who make up 7% of Iran's population [18] and are the secondlargest ethnic minority group in Iran, with distinctive cultural, linguistic, and religious characteristics. The study population consisted of urban women and men aged 16 to 75. The initial sample size was estimated at 400 individuals using the Cochran formula. To improve accuracy, a design effect of 2 was applied, increasing the final estimated sample size to 800 individuals. Ultimately, 770 valid questionnaires were collected, yielding a response rate of 96 percent. The allocation of participants from each city was based on the population aged 16 to 75, according to the most recent census in Iran. Specifically, Ilam contributed 102 individuals, Kermanshah 483, and Sanandaj (the capital of Kurdistan province) 215. The sampling method involved selecting every 10th house in each neighborhood at equal intervals. Participants were included in the study based on their willingness to participate, absence of physical disabilities and severe mental illnesses, and being within the age range of 16 years to 75 years.

Measurements

The research instrument used was a questionnaire divided into three parts. The first section collected demographic information, including age, gender (1: man; 2: woman), marital status (1: single; 2: married; 3: widowed), education level (1: below diploma; 2: diploma; 3: university), and chronic disease status (1: yes; 2: no). The second part assessed SSS using a selfreport scale based on a social ladder [19,20]. This scale measures individuals' perceptions of their occupation, education, and wealth on a 10-point ladder, where higher scores reflect a better perceived socioeconomic status. The validity and reliability of this index were confirmed in the study by Operario et al. [19]. The third section evaluated SRH and QoL using the first two questions from the 26-item World Health Organization Quality of Life (WHOQOL-BREF-26) questionnaire. This section measured respondents' perceptions of their health and QoL over the past four weeks using a self-report Likert-type scale with five options (very bad, bad, neither good nor bad, good, very good). Higher scores indicated a better state of SRH and QoL [21]. The final section included the SC questionnaire developed by Rafiey et al. [22], which consists of 20 questions measuring SC across two dimensions: bonding and bridging. The bonding SC factors included belonging and empathy (6 questions), trust (3 questions), and participation (2 questions). The bridging SC factors included different interest (5 questions) and different style (4 questions). Responses were measured on a 5-point Likert-type scale (not at all, not really, somewhat, most of the time, always), with scores ranging from 1 to 5. Higher scores indicated higher levels of SC. Rafiey et al. [22] demonstrated through factor structure analysis that both dimensions of the questionnaire explain a total of 58% of the variance in SC, and the questionnaire exhibited high reliability (0.825).

Statistical Analysis

The data were analyzed using SPSS version 18 (SPSS Inc., Chicago, IL, USA) and Stata version 8 (StataCorp., College Station, TX, USA). The dependent variables, SRH and QoL, which are interval variables, were categorized into 2 groups: "very bad," "bad," and "somewhat" were grouped as poor SRH/QoL, while "good" and "very good" were classified as good SRH/QoL. Logistic regression was selected as the appropriate method for analyzing the nominal dependent variable. This regression technique was applied hierarchically across three models for each dependent variable. The first model, a baseline model, included age groups and gender (model 1 baseline model).

In the second model, demographic and contextual variables were included (model 2), followed by the inclusion of the SC dimension in the third model (model 3). Descriptive statistics, including the mean and standard deviation (SD), were utilized to present the variables. Analysis of variance was employed to investigate the relationships of age group, marital status, education, and residence with the main variable. The *t*-test was used to analyze differences between gender and chronic disease with the main variable, and Pearson's correlation was utilized to correlate the main variables. A confidence level of 0.05 was considered.

Ethics Statement

This study obtained ethical approval from the Research Ethics Committee of Kermanshah University of Medical Sciences (No. IR.KUMS.REC.1398.118). The study objective was explained and written informed consent was obtained from all participants.

RESULTS

The study included 770 participants, with a mean age of 33.91 years (SD, 11.66). Women comprised 47.1% of the respondents. Descriptive analysis showed that 49.4% of participants were married, 51.6% had a university education, and 9.7% reported having an underlying disease. The mean SSS score for the respondents was 4.78 (SD, 2.19). Descriptive results based on the participants' place of residence indicated that the mean SRH score in Kermanshah was 3.71 (SD, 0.82), which was higher than the scores in Sanandaj and Ilam. This difference was statistically significant (p=0.001). The analysis also revealed that the average scores of the main variables varied significantly with the level of education (p=0.001). Furthermore, the average scores for QoL and SSS across different age groups did not show significant differences (p>0.05) (Table 1).

Pearson correlation analysis of the main variables revealed that SRH exhibited the strongest positive correlation with QoL (r=0.584, p<0.001). Additionally, the results indicated positive and significant correlations between SSS and both QoL and SRH (r=0.446, p<0.001; r=0.317, p<0.001) (Table 2).

Bivariate logistic regression was utilized to identify the factors that influence perceived QoL. Initially, variables were entered hierarchically into the model. In the first model (baseline model; model 1), age and gender were included, but neither

Table 1. Values of the main variables according to demographic characteristics

Characteristics	Category	n (%)	SRH	QoL	SSS	SC
Gender, n=770	Men	407 (52.9)	3.68 ± 0.95	3.07 ± 0.99	4.69±2.10	70.83 ± 14.70
	Women	363 (47.1)	3.52 ± 1.00	3.21 ± 0.98	4.88 ± 2.28	70.34 ± 15.65
	<i>p</i> -value		0.024	0.048	0.241	0.659
Age group (y), n=762	16-30	355 (46.6)	3.68 ± 1.00	3.10 ± 1.06	4.90 ± 2.20	69.17 ± 15.07
	31-50	325 (42.7)	3.57 ± 0.94	3.21 ± 0.88	4.66 ± 2.12	73.40 ± 13.43
	≥51	82 (10.7)	3.37 ± 0.97	3.00 ± 1.00	4.62 ± 2.29	67.10 ± 18.03
	Total	33.91 ± 11.66				
	<i>p</i> -value		0.030	0.162	0.301	0.001
Marital status, n=770	Single	363 (47.1)	3.71 ± 0.93	3.10 ± 1.00	4.75 ± 2.13	70.39 ± 13.77
	Married	380 (49.4)	3.54 ± 1.01	3.21 ± 0.97	4.91 ± 2.22	71.18 ± 16.45
	Widow	27 (3.5)	2.93 ± 0.83	2.67 ± 0.73	3.26 ± 1.95	65.22 ± 12.94
	<i>p</i> -value		0.001	0.012	0.001	0.133
Education, n=769	Under diploma	129 (16.8)	3.27 ± 0.99	2.98 ± 0.93	4.27 ± 2.35	68.33 ± 16.79
	Diploma	243 (31.6)	3.47 ± 1.02	3.00 ± 1.00	4.42 ± 2.07	68.32 ± 16.68
	Academic	397 (51.6)	3.87 ± 0.91	3.27 ± 0.98	5.15 ± 2.13	72.69 ± 13.20
	<i>p</i> -value		0.001	0.001	0.001	0.001
Chronic disease, n=755	Yes	73 (9.7)	2.90 ± 0.98	2.99 ± 0.95	4.64 ± 2.25	68.15 ± 16.67
	No	682 (90.3)	3.69 ± 0.94	3.16 ± 0.99	4.80 ± 2.18	71.04 ± 14.70
	<i>p</i> -value		0.001	0.155	0.569	0.158
County, n=770	llam	92 (11.9)	3.54 ± 1.05	3.19 ± 0.99	5.09 ± 2.28	67.70 ± 19.02
	Kermanshah	472 (61.3)	3.71 ± 0.82	3.21 ± 0.91	4.54 ± 2.11	72.81 ± 10.94
	Sanandaj	206 (26.8)	3.37 ± 1.22	2.95 ± 1.13	5.17 ± 2.26	66.83 ± 19.89
	<i>p</i> -value		0.001	0.006	0.001	0.001

Values are presented as mean ± standard deviation.

SRH, self-rated health; QoL, quality of life; SSS, subjective socioeconomic status; SC, social capital.

Table 2. Matrix of Pearson correlation coefficients for the main variables

Variables	SRH	QoL	SSS	SC
SRH	-	0.584***	0.317***	0.362***
QoL	-	-	0.446***	0.342***
SSS	-	-	-	0.179***
SC	-	-	-	-

SRH, self-rated health; QoL, quality of life; SSS, subjective socioeconomic status; SC, social capital.

was significant. The second model included demographic and contextual variables, and among these, SSS (OR, 1.51; 95% CI, 1.38 to 1.65) and marital status (OR, 1.55; 95% CI, 1.04 to 2.33) were significant. In the third model (model 3), in addition to demographic and contextual variables, dimensions of the SC variable were introduced. Upon the inclusion of this new variable, the variables of SSS (OR, 1.47; 95% CI, 1.34 to 1.61), belonging and empathy (OR, 1.09; 95% CI, 1.03 to 1.15), and trust (OR, 1.06; 95% CI, 1.00 to 1.13) were significance. Specifically,

for each 1-unit increase in socioeconomic status, the likelihood of having a positive perception of QoL increased by 47%. The variables of belonging, empathy, and trust increased the likelihood of having a positive perception of QoL by 9% and 6%, respectively (Table 3).

Additionally, logistic regression was utilized to identify the determinants of SRH. The variables were entered into the model hierarchically. In the first model (baseline model; model 1), age group and gender were included. Among the variables in the model, gender (OR, 0.72; 95% CI, 0.53 to 0.97), the age group of 31-50 years (OR, 0.65; 95% CI, 0.47 to 0.88), and the age group of 51 and above (OR, 0.46; 95% CI, 0.28 to 0.74) were significant. In the second model (model 2) demographic and contextual variables were included. Among the variables in the model, gender (OR, 0.67; 95% CI, 0.47 to 0.93), being a widow (OR, 0.31; 95% CI, 0.11 to 0.89), academic education (OR, 2.11; 95% CI, 1.31 to 2.39), SSS (OR, 1.32; 95% CI, 1.22 to 2.34), chronic disease (OR, 4.31; 95% CI, 2.31 to 7.70), and residing in Kermanshah (OR, 1.95; 95% CI, 1.17 to 3.26) were significant. In

^{***}p < 0.001.



Table 3. Results of logistic regression analysis for the determinants of QoL

Variables	Categories	Model 1 (baseline model)	Model 2	Model 3
Age group (y)	16-30	1.00 (reference)	1.00 (reference)	1.00 (reference)
	31-50	0.99 (0.72, 1.35)	0.94 (0.62, 1.42)	0.85 (0.56, 1.31)
	≥51	0.94 (0.57, 1.56)	1.04 (0.53, 2.03)	1.03 (0.51, 2.06)
Gender		1.25 (0.94, 1.69)	1.24 (0.89, 1.73)	1.21 (0.85, 1.73)
Marital status	Single	-	1.00 (reference)	1.00 (reference)
	Married	-	1.55 (1.04, 2.33)	1.42 (0.93, 2.16)
	Widow	-	0.39 (0.10, 1.48)	0.48 (0.12, 1.85)
Education	Under diploma	-	1.00 (reference)	1.00 (reference)
	Diploma	-	1.10 (0.64, 1.89)	1.10 (0.93, 1.91)
	Academic	-	1.61 (0.97, 2.68)	1.54 (0.92, 2.60)
SSS		-	1.51 (1.38, 1.65)	1.47 (1.34, 1.61)
Chronic disease	Yes	-	1.00 (reference)	1.00 (reference)
	No	-	1.73 (0.93, 3.23)	1.75 (0.92, 3.33)
Residence	llam	-	1.00 (reference)	1.00 (reference)
	Kermanshah	-	1.27 (0.76, 2.16)	1.18 (0.68, 2.04)
	Sanandaj	-	0.92 (0.51, 1.63)	1.00 (0.55, 1.84)
Belonging and empathy		-	-	1.09 (1.03, 1.15)
Trust		-	-	1.06 (1.00, 1.13)
Partnership		-	-	1.04 (0.93, 1.17)
Different interest		-	-	0.99 (0.95, 1.03)
Different style		-	-	0.96 (0.90, 1.02)
Cons		0.42 (0.26, 0.68)	0.01 (0, 0.04)	0 (0, 0.01)
LR-chi ² (3 11 16)		2.43	145	181
Prob>chi ²		0.490	0.001	0.001
Pseudo R ²		0.002	0.150	0.180
Log likelihood		-500	-419	-401
No. of observations		762	746	746

Values are presented as odds ratio (95% confidence interval).

QoL, quality of life; SSS, subjective socioeconomic status; LR, likelihood-ratio test.

the third model (model 3), along with demographic and contextual variables, SC variables were introduced. Upon entering the dimensions of this new variable (SC), significant relationships were found in the final model for gender (OR, 0.65; 95% CI, 0.46 to 0.92), the age group of 31-50 years (OR, 0.59; 95% CI, 0.38 to 0.91), academic education (OR, 2.00; 95% CI, 1.22 to 3.26), SSS (OR, 1.27; 95% CI, 1.16 to 1.38), chronic disease (OR, 4.52; 95% CI, 2.49 to 8.19), belonging and empathy (OR; 1.06; 95% CI, 1.01 to 1.11), and participation (OR, 1.12; 95% CI, 1.00 to 1.24). The results indicated that the likelihood of having a positive SRH was 37% lower in men than in women. Additionally, having an academic education increased the likelihood of good health by 93%. Each 1-unit increase in SSS increased the likelihood of having a positive SRH by 27%. Furthermore, not having a chronic disease increased the likelihood of good health

by 4.5 times. Ultimately, comparing the two regression models demonstrated that including dimensions of SC enhanced the explanatory power of both models. It was observed that SC and background variables had greater explanatory power in predicting the perception of QoL among the respondents (Table 4).

DISCUSSION

The study aimed to investigate the impact of SC dimensions—bonding and bridging SC—on SRH and QoL among the Kurdish ethnic minority in western Iran. QoL is a multifaceted concept reflecting individuals' happiness and well-being, encompassing their evaluations of various life aspects, emotional responses to life events, sense of fulfillment, satisfaction with

Table 4. Results of multiple regression analysis for the determinants of SRH

Variables	Categories	Model 1 (baseline model)	Model 2	Model 3
Age group (y)	16-30	1.00 (reference)	1.00 (reference)	1.00 (reference)
	31-50	0.65 (0.47, 0.88)	0.67 (0.44, 1.00)	0.59 (0.38, 0.91)
	≥51	0.46 (0.28, 0.74)	0.71 (0.37, 1.38)	0.73 (0.37, 1.45)
Gender		0.72 (0.53, 0.97)	0.67 (0.47, 0.93)	0.65 (0.46, 0.92)
Marital status	Single	-	1.00 (reference)	1.00 (reference)
	Married	-	1.06 (0.71, 1.58)	1.01 (0.67, 1.53)
	Widow	-	0.31 (0.11, 0.89)	0.38 (0.13, 1.11)
Education	Under diploma	-	1.00 (reference)	1.00 (reference)
	Diploma	-	1.32 (0.77, 0.04)	1.40 (0.84, 2.32)
	Academic	-	2.11 (1.31, 2.39)	2.00 (1.22, 3.26)
SSS		-	1.32 (1.22, 2.44)	1.27 (1.16, 1.38)
Chronic disease	Yes	-	1.00 (reference)	1.00 (reference)
	No	-	4.31 (2.31, 7.70)	4.52 (2.49, 8.19)
Residence	llam	-	1.00 (reference)	1.00 (reference)
	Kermanshah	-	1.95 (1.17, 3.26)	1.70 (0.98, 2.90)
	Sanandaj	-	1.07 (0.62, 1.87)	1.13 (0.63, 2.03)
Belonging and empathy		-	-	1.06 (1.01, 1.11)
Trust		-	-	1.03 (0.97, 1.11)
Partnership		-	-	1.12 (1.00, 1.24)
Different interest		-	-	1.00 (0.96, 1.05)
Different style		-	-	0.97 (0.91, 1.02)
Cons		3.42 (2.08, 5.60)	0.02 (0, 0.09)	0 (0, 0.01)
LR-chi ² (3 11 16)		17.5	137.5	173.5
Prob>chi ²		0.001	0.001	0.001
Pseudo R ²		0.02	0.14	0.17
Log likelihood		-499	-427	-409
No. of observations		762	746	746

Values are presented as odds ratio (95% confidence interval).

SRH, self-rated health; SSS, subjective socioeconomic status; LR, likelihood-ratio test.

work, and personal relationships [5]. In the final model analyzing factors influencing QoL, SSS was found to be significant in models 1 and 2. This finding is consistent with the results of the studies by Rajabi Gilan et al. [7] and Keyvanara et al. [23] in Iran, which demonstrated the effects of SSS on life satisfaction and QoL. Additionally, Ghasemi et al. [24] indicated in a study in marginal areas in western Iran that SSS significantly affected health-related QoL, consistent with the present study. Furthermore, Nutakor et al. [25] also revealed in a study involving an adult population that socioeconomic status was a strong predictor of SC and QoL. They concluded that SC serves as an important mechanism through which the socioeconomic status of adults influences their QoL. Another key finding of this research was the influence of SSS on SRH. This result aligns with established literature, illustrating that higher SSS correlates

with better SRH. A study conducted by Achdut and Sarid [26] demonstrated variations in SRH and mental health across different socioeconomic status levels. To improve QoL, policymakers and practitioners can focus on fostering and reinforcing social networks and connections within communities, promoting SC among individuals, and ensuring fair access to resources and opportunities. In another part of the results, the bonding SC, namely belonging, empathy, and trust, were identified as having a substantial influence on QoL. The study's findings regarding the impact of social trust on QoL were consistent with the research of Ji et al. [27] and Adedeji et al. [28]. A study conducted by Xu et al. [29] among rural residents in China revealed that trust can significantly enhance the happiness and well-being of rural residents by augmenting SC, which is consistent with the present study. Trust plays a pivotal role in

both business transactions and daily life, fostering social bonds. High social trust acts as a cohesive force and bolsters social cohesion [30]. Another outcome of this study involved examining the impact of SC on SRH. The findings highlighted the influence of belonging, empathy, and participation on SRH. Similarly, Bai et al. [31] demonstrated that the experience of perceived poor health is higher among individuals with lower levels of social participation, cohesion, and interaction, which aligns with our study. The positive relationships of SC, social participation, and interaction with SRH suggest the protective role of social participation and interaction within these communities, a finding also supported by other studies [32]. A study conducted by Sevydan and Abdolsamadi [33] among Iranian men and women found that social participation, social support, personal trust, generalized trust, age, and gender significantly contributed to the level of mental health. Research indicates that SC provides a form of social support for individuals, encompassing financial, informational, practical, and emotional support, with emotional support notably contributing to an individual's well-being [34]. Theorists such as Giddens [35] believe that this emotional support is a supportive shield that all ordinary individuals seek refuge in when facing the challenges of everyday life. Furthermore, Putnam [36] suggested that the potential connection between SC and health may be attributed to 4 reasons: First, social networks provide material benefits that alleviate anxiety; Second, networks promote health indicators; Third, networks can better generate demand for health services, and fourth, social interaction and activity activate the body's defense system.

In general, minority groups in Iran, such as the Kurds in this study, are located in border regions and less developed areas. These less developed provinces typically exhibit a traditional form of SC that emphasizes bonding within the group. Consequently, economic exchanges tend to prioritize this bonding SC, with fewer transactions extending beyond the group. As a result, in minority environments, the strong influence of bonding SC and the diminished role of bridging SC lead to exchanges that are limited, non-inclusive, incomplete, non-transparent, and impoverished. This dynamic significantly impacts the socioeconomic conditions, which, in conjunction with bonding SC, decisively affect the health and QoL of the residents in these areas.

Another finding of this research was the impact of gender on SRH. Our results indicated that men were less likely to report positive SRH compared to women. This aspect of our findings contradicts the results of a study by Ghalichi et al. [37] in Iran, which demonstrated that age, being women, and poor economic status were negatively associated with SRH. Furthermore, Muhammad and Maurya [38] found in a study on elderly Indians that a higher percentage of elderly women reported poorer health compared to elderly men, which also contradicts our study. The differences in health outcomes between men and women depend on epidemiological factors, social conditions, and behaviors, many of which are not consistent over time or across countries. Currently, in all countries, men's life expectancy is lower than that of women, although this was not always the case. In most countries, women face more challenges in performing daily activities, while men generally have better functional capabilities. Men more frequently have cardiovascular diseases, while women are more prone to inflammation-related diseases [39]. In the minority environments in the west of Iran, most men are responsible for their family's economic well-being. The stress associated with this economic burden has long been recognized as a detrimental factor to health. Many unemployed men in these areas engage in illegal and dangerous activities such as goods smuggling from border areas. Due to legal restrictions, these activities often lead to death and disability, contributing to a lower likelihood of better health among men.

Another finding of this study was the impact of chronic disease on SRH. Our results indicated that the absence of a chronic disease predicted a more than fourfold increase in the likelihood of better SRH. Similarly, a study of cancer patients in Iran demonstrated that health beliefs and perceptions of illness significantly influence health behaviors [40].

The overall findings suggest that the dimensions of bonding SC were more effective in predicting respondents' perceived QoL and SRH. Bonding SC, which is based on strong social connections related to family, kinship, gender, ethnicity, and religion, significantly impacted both SRH and QoL. The primary focus of this initiative is to delegate local responsibilities to the community and to enhance participation in healthcare through the implementation of comprehensive health policies. It also aims to improve the socioeconomic status of minority groups in western Iran, which is expected to lead to poverty reduction, better environmental conditions, and a decrease in perceived discrimination. These improvements can effectively enhance their health status and QoL. A significant strength of this study is its examination of SC in relation to health and QoL among a linguistic and cultural minority group



in western Iran, an area previously unexplored in this context. This cross-sectional study at the regional level can serve as a benchmark for comparison with other ethnic studies in Iran concerning health and social indicators. However, the study has several limitations that need to be addressed. The cross-sectional design makes it difficult to establish a causal relationship between SC and both SRH and QoL. Additionally, the reliance on SRH and QoL data may have introduced bias due to participants providing inaccurate responses. Furthermore, the study's analysis of SC was limited to the individual level and did not consider SC at the community level.

NOTES

Data Availability

The data sets used and analyzed in this study are available from the corresponding author on reasonable request.

Conflict of Interest

The authors have no conflicts of interest associated with the material presented in this paper.

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