

Female education ban by the Taliban: A descriptive survey study on suicidal ideation, mental health, and health-related quality of life among girls in Afghanistan

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ABSTRACT

Background Following the Taliban's resurgence, Afghan girls were prohibited from attending school and university, likely causing adverse psychological effects. Therefore, the present study investigated depression, suicidal ideation, and quality of life (QoL) among Afghan girls banned from education by the Taliban.

Methods A survey study assessed depression, suicidal ideation, and QoL among 426 females prohibited from attending secondary schools, high schools, and universities by the Taliban. The study used the CES-D 20 Scale to assess depression, and the WHOQOL-Bref Questionnaire to assess QoL. Associations between variables were tested with chi-square tests, and predictors of QoL were analyzed through multivariate regression analysis.

Results Among the 426 participants, 87.6% exhibited depression symptoms and 49.8% reported suicidal thoughts. Significant predictors of overall QoL included monthly family income ($B = 0.147$, $P = 0.001$), recent others' behavior toward participants ($B = -0.247$, $P < 0.001$), physical illness ($B = 0.110$, $P = 0.011$), experiencing a recent traumatic event ($B = 0.108$, $P = 0.015$), depression ($B = -0.159$, $P < 0.001$) and suicidal ideation ($B = -0.187$, $P < 0.001$).

Conclusions In Taliban-ruled Afghanistan, the results indicated that female students who have been prohibited from studying in classes have a high prevalence of depression and suicidal ideation. Having depression and suicidal ideation significantly predicted decreased quality of life among female students.

Keywords Afghan girls, depression, education ban, quality of life, suicidal ideation, Taliban

Introduction

The Centers for Disease Control and Prevention (CDC) defines mental health as emotional, psychological and social well-being [1]. An individual's mental state determines thoughts, moods, and actions. Mental health issues may develop into disorders or illnesses, but not always. Mental health disorders are often accompanied by distress, impairment in functioning and/or risk of self-harm [2]. These disorders may develop when ongoing symptoms cause frequent stress and alter day-to-day functioning [4]. Various individual, social, and structural determinants may affect and shift an individual's mental state. In addition, biological and psychological factors may make some individuals more susceptible to mental health issues [2]. Unfavorable social, economic, geopolitical, and environmental circumstances increase risk of developing a mental health disorder. These determinants are specifically detrimental during developmental periods such as childhood [2].

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Causes include a combination of biological, social and psychological factors. For many individuals diagnosed with depression, symptoms are severe enough to cause issues in day-to-day life including social activities and relationships [3]. Depression may cause loss of appetite, loss of sleep, fatigue, avoidance of social interaction, self-harm, and suicidal thinking [3]. Often, an individual with depression will also have an anxiety disorder. Occasional anxiety is normal to experience, but an anxiety disorder causes frequent, intense, and persistent worry about everyday situations. Anxiety disorders include panic and anxiety attacks [5].

Depression has been very common among people in Afghanistan during the past few years [6]. Depression is a mental health condition commonly associated with sleep disturbance, loss of appetite, and mood changes. It has been reported to be more common among the female population of Afghanistan and worldwide [7-9]. Afghanistan, which is a resource-depleted country, has faced political and social conflicts and unrest for many years. This has led to development of various mental health issues and poor quality of life among its people [10-12]. According to the Institute for Health Metrics and Evaluation, approximately 5% of the Afghani population was suffering from depression in 2019 [20].

Mental health issues greatly relate to and can impact an individual's quality of life (QoL). QoL is a concept that explains the well-being of an individual or population in regard to positive and negative elements within the entirety of their existence at a specific point in time. Some aspects of QoL include health, relationships, education and social status, wealth, work environment, safety, and freedom [13]. The World Health Organization asserts that QoL is an individual's perception of their position in life in relation to their culture and value system, goals, expectations, and concerns. QoL can be used to assess the effectiveness of different types of government or social changes. This includes the different aforementioned aspects of QoL [14].

Social determinants of health, well-being, and quality of life include economic stability, education and healthcare access, neighborhood and built environment, and social and community context [15]. The main social determinants for mental health include adverse early life experiences, poor education, unemployment, job insecurity, poverty, and income inequality. Other determinants include exposure to violence, conflict and war, sexism, and other forms of non-race-based discrimination. Exposure to these determinants increases risk for mental illness [16]. Of these determinants, education is prominent in mental health and QoL. The role of education as a determinant of mental health was analyzed by observing the shift in education through a policy reform in Zimbabwe. Using survey data, it was found that additional education reduced the probability and severity of symptoms related to depression and anxiety. In addition, the results indicated that education had a larger positive effect on mental health for women [17]. In another study, education was positively associated with overall life satisfaction in aspects such as income, employment, marriage, and health [18]. Both studies concluded that education had a positive effect on individuals' mental health and QoL.

In Afghanistan, following the recent ban of females attending secondary school, the Taliban prohibited university education for all women [19]. As aforementioned, education has a strong effect on mental health and QoL. Its effect differs during different developmental years, but it still has a strong impact on the overall well-being of an individual. The education ban that the Taliban introduced for Afghan females needs to be

investigated in relation to its effect on their health. This is crucial in understanding the projection of change for women's society during the rule of the Taliban. It may greatly affect female youth and future generations of Afghan women. Determining the impact of the ban is important in raising awareness of the situation for females in Afghanistan considering the great harm that negative mental health and QoL has on the overall state of an individual. Therefore, present study examined depression, suicidal ideation, and their relationship with quality of life (QoL) among Afghan girls who were banned from attending their studies by the Taliban in Afghanistan.

Methods

A descriptive survey study was conducted among former female students (N=426) who had been banned from attending secondary schools, high schools, and universities by the Taliban. The study participants were aged 12-32 years and were recruited using convenience sampling technique across Herat city (Afghanistan). Participants were interviewed face-to-face and their answers were recorded by the data collectors. The eligibility criteria to participate in the present study were: (i) being female; (ii) being a former student and currently banned from attending either a secondary school, high school or university; (iii) being able to understand the Dari language, and (iv) providing written or verbal informed consent if they were adults (aged 18 years or above) or from parents (if they were aged 12 -17 years).

The survey used in the present study comprised four sections. The sections assessed: socio-demographics, mental health, quality of life, and a variable to assess suicidal ideation. The socio-demographic section included questions concerning age, marital status, educational level, type of residency (urban or rural), monthly family income, occupation, others' behavior towards participants in the past month (how positive or negative other individuals behaved towards the participants during the past month), feeling physically ill during the past month, and whether a traumatic event had occurred during the past month.

In order to assess participants' quality of life, the Dari language-validated version of the World Health Organization Quality of Life-BREF (WHOQOL-BREF-26) was used [24]. The WHOQOL-BREF-26 comprises four subscales (physical health domain, psychological health domain, social relationships domain, and environment domain). All of the items (e.g., *"To what extent do you feel that physical pain prevents you from doing what you need to do?"*) are scored from 1 (*not at all*) to 5 (*an extreme amount*). In order to make scores comparable with the WHOQOL-100, raw scores were converted into the transformed score to range within 0-100. For each subscale of the WHOQOL-BREF 26, a total score of less than 46 indicates low QoL; 46 to 65 indicates moderate QoL; and higher than 65 indicates high QoL [25]. Cronbach's alpha in the present study was 0.85.

In order to assess participants' symptoms of depression, the Dari version of the 20-item Center for Epidemiological Studies Depression Scale (CES-D) [21-22] was used. The CES-D comprises three sub-scales (negative items, positive items, and interpersonal relationships). All of the items (e.g., *"I felt everything I did was an effort"*) are scored from 0 (*"rarely or none of the time/less than one day during the past week"*) to 3 (*"Most of all of the time/5-7 days during the past week"*). The scores range from 0 to 60. The standard cut-off score was used as follows: a score between 0 to 15 is considered as normal. Participants with a score higher than 15 are considered as having depression symptoms. Cronbach's alpha in the present study was 0.87.

Finally, to assess suicidal ideation, a single question was included in the survey (e.g., *“Have you thought about killing yourself or committing suicide since the education ban?”*) with two options (Yes, No).

Data entry was carried out using Microsoft Excel 2016. The analysis was performed with the IBM SPSS version 26.0 for Windows. The socio-demographic factors (age, marital status, educational level, type of residency, monthly family income, occupation, others’ behavior towards participants in the past month, feeling physically ill during the past month, and whether a traumatic event had occurred during the past month) were the independent variables. Depressive mood (symptoms of depression), suicidal tendency (suicidal ideation), and quality of life were the dependent variables. Descriptive statistics included means, standard deviations, frequencies, and percentages. Univariate analysis (chi-square tests) was used to evaluate the associations between independent variables and dependent variables. Multivariate analysis (linear regression analysis) was used to examine the predictors of depression, suicidal ideation, and quality of life among participants. All of the variables with a *p*-value less than 0.05 were considered as significant.

Results

More than half of the participants were in 18-32 years’ age group (54.0%). More than two-thirds of the participants were single (67.1%). Just over one-third of the participants reported that their monthly income was less than the equivalent of \$50 (US) (36.4%). Approximately four-fifths of the participants were living in urban areas (80.5%) [Table 1].

<Table 1>

The mean value for the physical domain of quality of life among participants was 56.34 (SD ± 17.07) which was almost over 50%. The mean value for the psychological domain of quality of life was 51.59 (SD ± 17.86). The mean value for the social relationship domain of quality of life was 55.78 (SD ± 23.67). The mean value for the environmental quality of life was the lowest at 46.55 (SD ± 17.32). The mean value for general quality of life was 52.56 (SD ± 14.99) [Figure 1].

<Figure 1>

Among participants, almost nine-tenths of the participants had symptoms of depression (87.6%). Monthly family income, others’ behavior towards the participants in the past month, and experiencing a traumatic event in the past month were found to be significantly associated depression [Table 2].

<Table 3>

Almost half of the participants reported suicidal ideation in the past two weeks (49.8%). Marital status, educational level, and others’ behavior towards participants in the past month were found to be significantly associated with suicidal ideation [Table 3].

<Table 3>

General quality of life was predicted by (i) monthly family income (B-coefficient = 0.147, $p=0.001$), indicating that higher family income was associated with better quality of life, (ii) others' behavior towards participants in the past month (B-coefficient = -0.247, $p<0.001$), indicating that negative behavior from others towards participants was associated with decreased quality of life, (iii) physical illness (B-coefficient = 0.110, $p=0.011$), indicating that physical illness was associated with decreased quality of life, (iv) experiencing a traumatic event in the past month (B-coefficient = 0.108, $p=0.015$), indicating that experiencing traumatic events was associated with decreased quality of life, (v) depression (B-coefficient = -0.159, $p<0.001$), indicating that depression was associated with decreased quality of life, and (vi) suicidal ideation (B-coefficient = -0.187, $p<0.001$), indicating that having suicidal ideation was associated with decreased quality of life. [Table 4].

<Table 4>

Physical domain quality of life was predicted by (i) others' behavior towards participants in the past month (B-coefficient = -0.195, $p<0.001$), indicating that negative behavior from others towards participants was associated with decreased physical quality of life, (ii) experiencing a traumatic event (B-coefficient = 0.167, $p<0.001$), indicating that experiencing traumatic events was associated with decreased physical quality of life, and (iii) depression (B-coefficient = -0.155, $p=0.001$), indicating that depression was associated with decreased physical quality of life.

Psychological domain quality of life was predicted by (i) monthly family income (B-coefficient = 0.118, $p=0.011$), indicating that higher family income was associated with better psychological quality of life, (ii) others' behavior towards participants in the past month (B-coefficient = -0.255, $p<0.001$), suggesting that negative behavior from others towards participants was associated with decreased psychological quality of life, (iii) physical illness (B-coefficient = 0.120, $p=0.006$), indicating that physical illness was associated with decreased psychological quality of life, (iv) experiencing traumatic events in the past month (B-coefficient = 0.096, $p=0.034$), suggesting that experiencing a traumatic event was associated with decreased psychological quality of life, and (v) depression (B-coefficient = -0.239, $p<0.001$), indicating that depression was associated with decreased psychological quality of life.

Social relationship domain quality of life was predicted by (i) monthly family income (B-coefficient = 0.120, $p=0.016$), indicating that higher family income was associated with better social quality of life, (ii) others' negative behavior towards participants in the past month (B-coefficient = -0.191, $p<0.001$), suggesting that negative behavior from others towards participants was associated with decreased social quality of life, and (iii) depression (B-coefficient = -0.104, $p=0.032$), indicating that depression was associated with decreased social quality of life.

Environment domain quality of life was predicted by (i) monthly family income (B-coefficient = 0.193, $p<0.001$), indicating that higher family income was associated with better environmental quality of life, (ii) others' negative behavior towards participants in the past month (B-coefficient = -0.206, $p<0.001$), suggesting that negative behavior from others towards participants was associated with decreased environmental quality of life, (iii) physical illness (B-coefficient = 0.181, $p<0.001$), indicating that physical illness was associated with

decreased environmental quality of life, and (iv) depression (B-coefficient = -0.124, $p=0.008$), indicating that depression was associated with decreased environmental quality of life [Table 5].

<Table 5>

Discussion

A total of 426 former female students who had been banned from attending secondary schools, high schools, and universities in Afghanistan by the Taliban Government participated in the present study. A slight majority of the participants were aged 18 to 32 years (54%) and two-thirds of them were single (67%). Approximately 80% of them were from urban residential settings and 36% had a monthly family income equivalent to less than 50 USD.

The WHO Quality of Life Questionnaire was used to assess their quality of life among four different domains. Decreased quality of life of the participants was predicted by lower monthly family income, others' negative behavior towards participants in the past month, being physically ill, experiencing traumatic events, presence of depression, and presence of suicidal ideation. Poor quality of life among the female students banned from attending education classes was significantly predicted by both depression and suicidal ideation. This is consistent with the findings of a study by Mohammadi et al. [26] who found low quality of life to be associated with depression among Afghan healthcare workers. Studies reported that quality of life is negatively affected by presence of depression symptoms among school and university students [32-33].

A majority of the present study's participants reported depression symptoms (87.6%). This is consistent with the findings of a study with Afghan students by Azam et al. [27] which reported that 69.7% of Afghan students reported depression. Another study conducted with high school girls from Tehran (Iran) reported that more than half of the students reported depression, anxiety, and stress [28]. The findings of the present study were also comparable to a study by Neyazi et al. investigating the prevalence and predictors of depression among Afghan women [20]. That study reported 79.1% of females had high levels of depression although this was among adult women. Another study conducted in Herat province of Afghanistan reported the prevalence of depression among female school students to be 66.0% [23]. This cohort was similar to that in the present study and carried out in the same region. Therefore, this suggests that the prevalence of depressive symptoms may have increased among this cohort since the ban on girls attending education classes was introduced. The education ban imposed by the Taliban has likely disrupted the normal routines and aspirations of female students, perhaps leading to increased levels of depression. Loss of educational opportunities, limited social interaction, and increased insecurity, are all possible related factors that may have contributed to feelings of depression among students. One meta-analysis of studies published during the COVID-19 pandemic reported that 25.2% of students had symptoms of depression [30]. Another meta-analysis of studies among students from low and middle income countries reported that 24.4% of girls had symptoms of depression [31]. The level of depression reported in the present study greatly exceeds the prevalence rates reported in both of these two recent meta-analyses.

Almost half of the participants in the present study (49.8%) reported having suicidal thoughts and ideation since the education ban was introduced which is comparable to a study by Azam et al. [27] in Afghanistan in

which 38.6% of participants reported having severe suicidal ideation and behaviors (although this study did not mention the timeframe over which suicide behaviors occurred). However, these prevalence estimates from Afghanistan are much higher than those in a meta-analysis by Mortier et al. among university students. They reported that lifetime suicidal ideation among university students was 22.3%, and 10.6% suicidal ideation in the past 12 months [34].

The youth population of Afghanistan, particularly the female population appears to be suffering from significant mental health issues and Afghanistan government has failed to address their problems. The recent ban on education of girls in Afghanistan by Taliban Government appears to have led to the development of worsening mental health issues and poor quality of life among Afghan females. The findings in the present study appear to be worse than those of previous study prior to the closure of schools and university to girls [23, 27].

The present study is subject to several limitations. One constraint is the scarcity of studies investigating the mental health of Afghan girls in schools and universities since the return of the Taliban to power in Afghanistan. This scarcity hampers the ability to compare the findings of the present study with other studies and identify any meaningful trends. Another limitation is the lack of assessment regarding the onset date of mental health symptoms or poor quality of life (QoL). Therefore, it remains unknown whether the participants' mental health condition changed following the education ban imposed by the Taliban in Afghanistan or if it predated it. The findings of this study offer estimates of depression and suicidal ideation among school and university girls who were prohibited from attending their education, as well as the association of these mental health disorders with QoL. However, it is important to note that all the data were self-reported, introducing potential biases associated with various methodological factors. Furthermore, it is important to note that this study employed a cross-sectional design, which precludes the establishment of causal relationships between the variables investigated. Another limitation is that the sample used in this study does not represent the entire population of female residents in Afghanistan who were prohibited from attending schools or university classes.

Conclusion

In Taliban-ruled Afghanistan, the results indicated that female students who have been prohibited from studying have a high prevalence of depression. Having depression and suicidal ideation significantly predicted decreased quality of life among female students. This has profound implications for their well-being and healthcare, and international health organizations need to implement regular depression screening programs. Prioritizing psychological counseling for vulnerable females denied education by the Taliban government appears to be essential.

Ethical considerations

The study conducted received ethical approval from the Ethical Committee of the Afghanistan Center for Epidemiological Studies (reference number #1.23.001; Jan 1, 2023). Prior to engaging with the participants, a comprehensive explanation of the study was provided. Written or verbal consent was acquired from all participants or their parents involved in the study, with the assurance that they had the freedom to withdraw from the interview at any given moment.

Authors' contribution: The study was designed by AQM and AN. MN was responsible for data collection. AN and BKP performed data analysis. AN, AQM, MN, QM, and DH contributed to the initial draft of the manuscript.

AN and MG critically reviewed, revised, edited, and completed the manuscript. All authors participated in the manuscript review process.

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Table 1. Characteristics of the female study sample in Herat, Afghanistan (n=426)

Characteristic	Categories	Number (N)	Percentage (%)
Age group	12–17-years	196	46.0
	18–32-years	230	54.0
Marital status	Single	286	67.1
	Married	140	32.9
Education level	Secondary school	62	14.6
	High school	194	45.5
	University	170	39.9
Residency	Urban	343	80.5
	Rural	83	19.5
Monthly family income	Less than \$50	155	36.4
	\$50 - \$100	158	37.1
	\$100 - \$200	79	18.5
	More than \$200	34	8.0
Others' negative behavior towards participants in the past month	Positive	275	64.6
	Negative	151	35.4
Feeling physically ill in the past month	Yes	21	4.9
	No	405	95.1
Experienced a traumatic event during the past month	Yes	215	50.5
	No	211	49.5
Total		426	100.0

Figure 1. Quality of life of participants in Herat, Afghanistan (n=426)

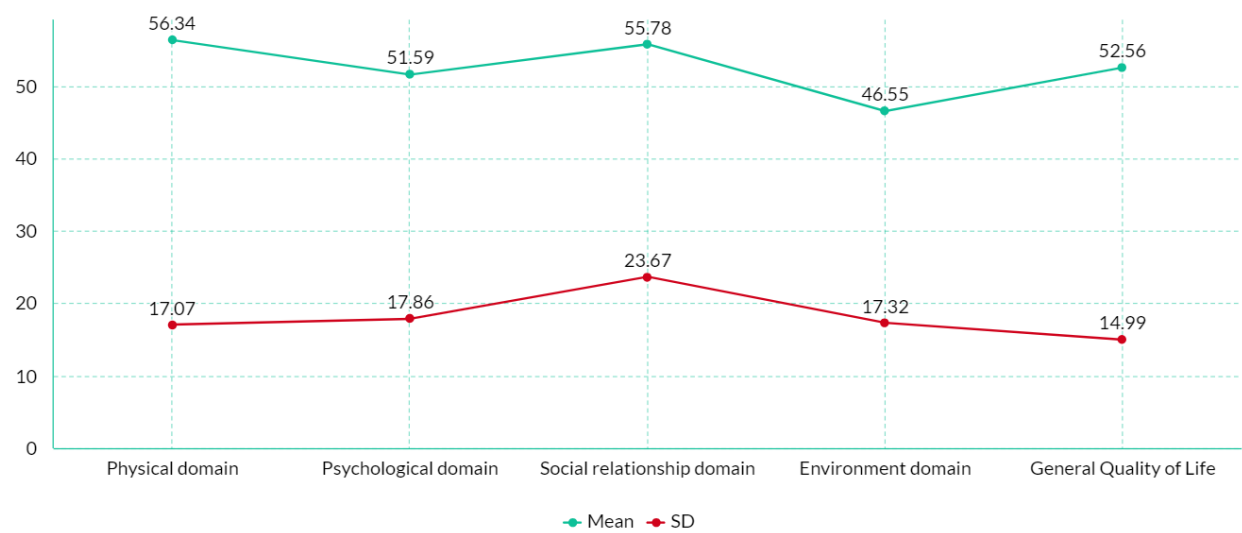


Table 2. Association of presence of mental health disorders with participants socio-demographic characteristics in Herat, Afghanistan (n=426)

Characteristic	Categories	Depression		<i>p</i> -value
		Absent N (%)	Present N (%)	
Age group	12–17-years	18 (9.2)	178 (90.8)	.060
	18–32-years	35 (15.2)	195 (84.8)	
Marital status	Single	34 (11.9)	252 (88.1)	.621
	Married	19 (13.6)	121 (86.4)	
Education level	Secondary school	7 (11.3)	55 (88.7)	.111
	High school	18 (9.3)	176 (90.7)	
	University	28 (16.5)	142 (83.5)	
Residency	Urban	43 (12.5)	300 (87.5)	.904
	Rural	10 (12.0)	73 (88.0)	
Monthly family income	Less than \$50	10 (6.5)	145 (93.5)	.004
	\$50 - \$100	20 (12.7)	138 (87.3)	
	\$100 - \$200	14 (17.7)	65 (82.3)	
	More than \$200	9 (26.5)	25 (73.5)	
Others' negative behavior towards participants	Positive	43 (15.6)	232 (84.4)	.007
	Negative	10 (6.6)	141 (93.4)	
Physically ill	Yes	4 (19.0)	17 (81.0)	.347
	No	49 (12.1)	356 (87.9)	
Experienced a traumatic event	Yes	18 (8.4)	197 (91.6)	.010
	No	35 (16.6)	176 (83.4)	
Total		53 (12.4)	373 (87.6)	

Table 3. Association of presence of mental health disorders with participants socio-demographic characteristics in Herat, Afghanistan (n=426)

Characteristic	Categories	Suicidal Ideation		p-value
		Absent N (%)	Present N (%)	
Age group	12–17-years	97 (49.5)	99 (50.5)	.777
	18–32-years	117 (50.9)	114 (49.1)	
Marital status	Single	156 (54.5)	130 (45.5)	.011
	Married	58 (41.4)	82 (58.6)	
Education level	Secondary school	40 (64.5)	22 (35.5)	.025
	High school	87 (44.8)	107 (55.2)	
	University	87 (51.2)	83 (48.8)	
Residency	Urban	117 (51.6)	166 (48.4)	.251
	Rural	37 (44.6)	46 (55.4)	
Monthly family income	Less than \$50	72 (46.5)	83 (53.5)	.281
	\$50 - \$100	81 (51.3)	77 (48.7)	
	\$100 - \$200	39 (49.4)	40 (50.6)	
	More than \$200	22 (64.7)	12 (35.3)	
Others' negative behavior towards participants	Positive	152 (55.3)	123 (44.7)	.005
	Negative	62 (41.1)	89 (58.9)	
Physically ill	Yes	7 (33.3)	14 (66.7)	.112
	No	207 (51.1)	198 (48.9)	
Experienced a traumatic event	Yes	104 (48.4)	111 (51.6)	.438
	No	110 (52.1)	101 (47.9)	
Depression	Absent	40 (75.5)	13 (24.5)	<.001
	Present	174 (46.6)	199 (53.4)	
Total		214 (50.2)	212 (49.8)	

Table 4: Linear regression analysis of quality of life on participants' characteristics and their mental health disorders in Herat, Afghanistan (n=426)

Variable	<i>R-Co</i>	<i>Adjusted R-Co</i>	<i>B-Co</i>	<i>p-value</i>
Overall score	.244	.226		
Age group			.017	.788
Marital status			.018	.692
Education			-.021	.735
Residency			-.001	.983
Monthly family income			.147	.001
Others' negative behavior*			-.247	<.001
Physically ill			.110	.011
Experienced traumatic event			.108	.015
Depression			-.159	<.001
Suicidal ideation			-.187	<.001

Co = coefficient

Table 5: Linear regression analysis of domains of quality of life on participants' characteristics and their mental health disorders in Herat, Afghanistan (n=426)

Domain	Variable	<i>R-Co</i>	<i>Adjusted R-Co</i>	<i>B-Co</i>	<i>p-value</i>
Physical	Overall score	.143	.124		
	Age group			.028	.683
	Marital status			-.066	.176
	Education			-.022	.745
	Residency			-.051	.276
	Monthly family income			.049	.304
	Others' negative behavior			-.195	<.001
	Physically ill			.081	.076
	Experienced traumatic event			.167	<.001
	Depression			-.155	.001
Psychological	Overall score	.208	.191		
	Age group			-.043	.512
	Marital status			-.007	.874
	Education			.022	.730
	Residency			.008	.854
	Monthly family income			.118	.011
	Others' negative behavior			-.255	<.001
	Physically ill			.120	.006
	Experienced traumatic event			.096	.034
	Depression			-.239	<.001
Social-relationship	Overall score	.094	.074		
	Age group			.101	.149
	Marital status			.044	.386
	Education			-.094	.170
	Residency			.030	.527
	Monthly family income			.120	.016
	Others' negative behavior			-.191	<.001
	Physically ill			.029	.545
	Experienced traumatic event			.068	.157
	Depression			-.104	.032
Environment	Overall score	.162	.144		
	Age group			.019	.774
	Marital status			-.007	.883
	Education			-.025	.700
	Residency			-.024	.597
	Monthly family income			.193	<.001
	Others' negative behavior			-.206	<.001
	Physically ill			.181	<.001
	Experienced traumatic event			.013	.786
	Depression			-.124	.008

Co = coefficient