

Research Paper

Stress, Anxiety, Depression and Quality of Life among Young Adults Living Through COVID-19 Lockdown

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ABSTRACT

A crisis like COVID – 19 pandemics can probably trigger mental health problems or exacerbate existing ones. Mankind is expected to adapt to the new normal induced by COVID – 19 pandemic which include drastic changes in life style. The present study explores the relationship among stress, anxiety, depression and quality of life among young adults during COVID – 19 pandemic situations. The study consists of 181 participants aged between 18-24 years, living through lockdown. On statistical analysis it has been found that the level of depression among the general population during the pandemic has increased compared to the level of depression before the pandemic outbreak. Correlation analysis revealed that stress, anxiety and depression is negatively related to domains of quality of life. Results also revealed significant mean difference on stress, anxiety and quality of life with respect to monthly income. People with high monthly income tend to experience low level of stress, anxiety and experience good quality of life compared to those with low monthly income. Young adults who are engaging in group leisure activities during lockdown period found to have lower levels of depression, anxiety and stress and high levels of quality of life. A significant difference was observed on stress level based on the amount of family interaction. The decrease in family interaction was linked with high level of stress.

Keywords: Stress, Anxiety, Depression, Quality of Life, Young Adults, COVID-19 lockdown

Trauma during the period of young adulthood could have a long term impact. A crisis like COVID – 19 pandemics can probably trigger mental health problems or exacerbate existing ones. The series of unprecedented lockdowns, health anxiety, job loss and overall volatile environment compromise quality of life and trigger mental health issues. The drastic changes in life style, leisure activities, sleep patterns and eating habits have been experienced during these days as part of dealing with mounting uncertainty and adapting to “new normal”. The new normal induced by pandemic instigates people to stay away from others and isolate themselves in order to ensure safety. However, for many this

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strategy caused social isolation, suicidal tendency, negative thoughts, stress, helplessness and anxiety. The physical isolation from loved ones, increasing abuse at home and lack of emotional support can impair quality of life and can precipitate mental health issues such as stress, depression and anxiety.

Depression is characterized by persistent sadness and loss of interest in daily activities accompanied by variety of physical and emotional symptoms that affect functioning in social, occupational and family life (American Psychiatric Association, 2013). The pandemic outbreak is found to have a significant impact on the levels of depression among people. A meta-analysis of community-based studies have been found that the prevalence of depression is 7 times higher than previous years (Bueno-Notivol et.al., 2020). Similarly, there are chances that levels of stress and anxiety will be high during the pandemic. Baum (1990) defines stress as “a negative emotional experience accompanied by predictable biochemical, physiological, and behavioral changes that are directed toward adaptation either by manipulating the situation to alter the stressor or by accommodating its effects” American Psychological Association describes anxiety as “an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure”. The social isolation, fear of getting affected by the virus, job loss, feeling of helplessness can contribute to the high levels of stress, anxiety and depression among the general population. Early studies have suggested that people who are quarantined and are affected with the virus suffer from high levels of anxiety and stress (Rubin and Wessely, 2020). Early study conducted by Shigemura, Ursano, Morganstein, Kurosawa, Benedek (2020) suggests that fear of getting affected by a new and unknown virus can lead to mental health problems.

Quality of life is defined by the WHO (1998) as “individuals’ perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”. The physical isolation from peers, concerns and worries about studies or career, lack of engagement in academic as well as non academic activities, the fear of getting the illness, working at home, fear of the unprecedented things happening around, the uncertainty and confusions can negatively impact the quality of life of people and would have an adverse effect on stress, anxiety and depression levels. Increased anxiety could have a negative impact on quality of life of people (Kharshiing, Kashyap, Gupta et al., 2020). Effective coping with the new stressful and anxiety provoking events will reduce the risk of mental health problems and it can make each individual and community stronger and fosters physical health and quality of life. It is high time to tackle with the mental health issues faced during this pandemic outbreak. This current study investigates the relationship of stress, anxiety and depression with quality of life and how various factors like income, engagement in various leisure activities and family interactions impact stress, anxiety, depression and quality of life.

Objectives of the study

- To assess the extent of stress, anxiety and depression among young adults during COVID – 19 outbreak.
- To find out the relationship between stress, anxiety, depression and domains of quality of life among young adults during COVID – 19 outbreak.
- To find out whether stress, anxiety, depression and domains of quality of life differ with respect to monthly income.

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- To find out whether stress, anxiety, depression and domains of quality of life differ with respect to the type of leisure activity engaged during COVID – 19 lockdown period.
- To find out whether stress, anxiety, depression and domains of quality of life differ with respect to the changes in family interaction during COVID – 19 lockdown period.

MATERIALS AND METHOD

The sample for the present study included 181 young adults living through the lockdown due to COVID – 19 outbreaks in Kerala, belonging to the age group of 18-25 years. Convenience sampling technique was used for the selection of samples. Consent form for their participation in the study was obtained and confidentiality of the responses assured before administering the socio-demographic data form and questionnaires. Depression, Anxiety, and Stress Scales (DASS-21) by Lovibond and Lovibond (1995) and World Health Organization Quality of Life Questionnaire abbreviated version (WHOQOL-BREF) (WHO,1998) were administered to obtain data on stress, anxiety, depression and quality of life of participants.

Statistical analysis

Normality test revealed that the data follows a non normal distribution. Thereby Spearman's rank order correlations, Mann-Whitney U test, Kruskal-Wallis H test were employed to analyze the data. Descriptive statistics such as percentage, measures of central tendency and measures of dispersion also used to analyze the data.

RESULTS AND DISCUSSION



Figure 1 The levels of stress, anxiety and depression experienced by young adults during the period of COVID -19 lockdown

Figure 1 shows that 52.2% of the population is normal in the levels of depression. 18.2% of the population shows mild levels of depression, which indicates that those people have less

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intense symptoms of depression like low mood, mild sleeping problems, low appetite, reduced energy levels etc. many with mild levels of depression will be able to manage their problems but there may be some disruptions in social and occupational life. The results further show that 18.8% of the population suffers from moderate levels of depression. 6.1% of population suffers from severe depression and 4.4% of population suffers from very severe depression. According to National Mental Health Survey of India, 2015-16, the prevalence of depression was found to be 2.7% (Bueno-Notivol, J., et al.). Another study conducted by Arvind, Gururaj, Loganathan, et al. (2018) in collaboration with national mental health survey, the prevalence of depressive disorder was found to be 2.68%. The same study has also found that the life time prevalence of depression was found to be 5.25%. When comparing the results of this study with the previous researches conducted in India it is found that people suffering from major depression is more in number compared to the previous statistics. The increase in the percentage may be attributed to the prevailing condition of uncertainty and tensions created by the pandemic outbreak. The descriptive statistics on anxiety shows that 8.3% of population suffers from mild levels of anxiety, 18.8% of population suffers from moderate levels of anxiety, 9.9% of population suffers from severe levels of anxiety and 11% of population suffers from very severe levels of anxiety. And the statistics on levels of stress shows that 16.6% of the population shows mild levels of stress, 7.2% of population shows moderate levels of stress, 3.3% of population shows severe levels of stress and 1.7% of population shows very severe levels of stress.

Table 1. Spearman’s rank correlations among stress, anxiety, depression and domains of quality of life

Variables	M	SD	Stress	Anxiety	Depression	Physical QoL	Psychological QoL	Social QoL	Environment QoL
Stress	10.906	8.045	1						
Anxiety	8.829	7.930	.771**	1					
Depression	9.746	8.493	.777**	.723**	1				
Physical QoL	105.569	19.603	-.373**	-.375**	-.421**	1			
Psychological QoL	83.116	17.489	-.361**	-.239**	-.471**	.534**	1		
Social QoL	43.823	9.631	-.332**	-.276**	-.347**	.436**	.574**	1	
Environment QoL	119.912	22.966	-.280**	-.365**	-.300**	.575**	.429**	.394**	1

Note. M and SD are used to represent mean and standard deviation respectively.

**Indicates correlation is significant at 0.01 level

Table 1 shows a significant negative relationship between the four dimensions of quality of life (Physical, Psychological, Social and environmental) and depression, anxiety and stress. The study goes in line with the study conducted by SaeiGhareNaz, Ramezani Tehrani, Behrooz Lak, Mohammadzadeh, Nasiri, KholosiBadr and Ozgoli (2020). It is evident from the present study that in the midst of COVID-19 pandemic the relationships among the variables remain the same and poor quality of life is related with high levels of stress, anxiety and depression. As the person feel high sense of insecurity and vulnerability during the current COVID-19 pandemic situation they are more likely to experience stress, anxiety and depression. The COVID-19 pandemic forced young adults to change their mode of job as well as studies to online platform which creates stress and anxiety. Moreover the prevailing uncertainty intensifies the feeling that the physical environment around them is unhealthy which add on to their stress levels and lead to energy loss. The results also emphasis that job loss, less participation in leisure activities, poor sleep pattern, difficulty to

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concentrate, dissatisfaction in daily living activities and poor social relationships causes impaired quality of life and are associated with stress, anxiety and depression.

Table 2. Comparison of stress, anxiety, depression and domains of quality of life based on monthly income

Variables	Mean Rank				Kruskal wally H	P value
	Monthly income					
	less than 10000 (n=48)	10000 – 25000 (n=67)	25000 – 50000 (n=29)	more than 50000 (n=34)		
Stress	98.71	95.03	86.17	68.44	8.164	.043*
Anxiety	98.23	100.18	79.97	64.26	13.543	.004**
Depression	93.83	96.54	85.38	73.01	5.304	.151
Physical QoL	84.36	81.16	88.60	113.94	9.985	.019*
Psychological QoL	88.47	85.18	90.02	99.03	1.672	.643
Social QoL	82.90	85.31	86.03	110.03	7.045	.070
Environment QoL	75.97	87.22	82.26	119.28	15.479	.001**

Note. QoL = quality of life.

* P-value is significant at the 0.05 level (2-tailed).

** P-value is significant at the 0.01 level (2-tailed).

Table 2 indicates that the people with high monthly income are more likely to have increased quality of life and low levels of stress and anxiety. A study conducted by Zhang, Ou, Gao, Gao, Hu and Liu (2015) also confirms that low income could lead to worse quality of life. In order to cope up with current COVID-19 situation it is important to take preventive measures to ensure safety. In order to adapt to the “new normal” it is crucial to follow proper hygiene, safe travelling and consumption of nutrients enrich healthy food which requires enough money. Unemployment and economic crisis will make the daily life necessities in trouble and can be lead to increased stress and anxiety. This could be the reason for low income earners to experience high levels of stress and anxiety and to have impaired quality of life.

Table 3. Comparison of stress, anxiety, depression and domains of quality of life based on type of leisure activity engaged during lockdown period of COVID – 19 outbreak.

Variables	Type of leisure activity				Mann-Whitney U	P value
	Mean Rank		Sum of Ranks			
	Group (n=48)	Solitary (n=67)	Group (n=48)	Solitary (n=67)		
Stress	76.39	101.76	6798.50	8954.50	2793.500	.001**
Anxiety	79.75	98.36	7097.50	8655.50	3092.500	.015*
Depression	73.67	104.50	6557.00	9196.00	2552.000	.000**
Physical QoL	99.80	78.08	8882.00	6871.00	2955.000	.005**
Psychological QoL	99.83	78.05	8884.50	6868.50	2952.500	.005**
Social QoL	103.28	74.56	9191.50	6561.50	2645.500	.000**
Environment QoL	93.31	84.64	8304.50	7448.50	3532.500	.259

Note. QoL = quality of life.

* P-value is significant at the 0.05 level (2-tailed).

** P-value is significant at the 0.01 level (2-tailed).

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Table 3 indicates that there exists significant difference in the levels of stress, anxiety and depression based on the type of leisure activities that an individual engages in. People who engage in group leisure activities are found to have lower levels of depression, anxiety and stress. The domains of quality of life are also affected depending on the type of leisure activities people engaged in. Those who engage in group leisure activities are found to have more quality of life than people engaged in solitary leisure activities. The findings suggest that leisure activities may provide meaning, purpose and distraction from the worries, and sorrowful events in life. When people engages in group leisure activities it may further provide social support and people can share the worries, anxieties along with the activities. It probably helps them to reduce the stress and anxiety to an extent. Participation in group activities rather than solo activities have more profound effect on reducing anxiety, stress and depression (Street, James and cutt; 2007).The social or group activities provide people with a sense of belongingness and it helps them to distract themselves from the uncertain and unusual events happening around. So they disengage from the negative thoughts or feelings and feel better while involved in group activities. It further helps them to reduce anxiety, stress and depression levels and enhance their quality of life during the pandemic situation.

Table 4 Comparison of stress, anxiety, depression and domains of quality of life based on the changes in family interaction during lockdown period of COVID – 19 outbreak.

Variables	Mean Rank			Kruskal wally H	P value
	Changes in family interaction				
	Increased (n=153)	Decreased (n=14)	No change (n=14)		
Stress	92.72	105.18	58.07	6.769	.034*
Anxiety	90.55	114.29	72.61	4.550	.103
Depression	91.36	112.93	65.14	5.925	.052
Physical QoL	94.48	61.43	82.57	5.547	.062
Psychological QoL	93.09	95.43	63.71	4.178	.124
Social QoL	92.04	99.68	70.96	2.592	.274
Environment QoL	93.48	73.89	80.96	2.366	.306

Note. QoL = quality of life.

* P-value is significant at the 0.05 level (2-tailed).

Table 4 shows that family interaction produces a significant difference in levels of stress. The family interaction provides a space to share the worries and to discuss about the stressful events happened in life. The love, care and support an individual receives from family members will be helpful in reducing stress levels. The family interaction acts as a protective resource against stress especially during the pandemic outbreak. There is evidence that social support the person receives while interacting with family members seem to reduce the impact of stress (Thoits, 2010). The people who have increased interaction with other family members tend to feel more liking and intimacy to each other. Increased contact leads them to the feeling of belongingness and the support they get from family members are protective factors against the various stressful events especially in dealing with the anxiety and stress related to COVID-19 pandemic.

IMPLICATIONS

The study suggests that the present COVID-19 pandemic situation requires an immediate action to deal with the increased depression among the general population. The

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implementation of various policies by the government in order to educate people about the importance of mental health would promote help seeking behaviour among young adults if they are in a mental health crisis. Also, ensure the service of mental health professionals at the local health centers in order to deal with the mental health problems. The correlation analysis emphasizing the need of implementation of intervention programmes that intend to enhance all dimensions of quality of life in order to reduce the stress, anxiety and depression among young adults. Findings indicate that income has a significant role in stress, anxiety and quality of life experienced by young adults during COVID- 19 lockdown period. Improving equity in economic status through the implementation of schemes and policies that ensure basic financial safety and resolve unemployment issues may be useful in reducing stress and anxiety and in improving quality of life in certain domains among young adults. As the study suggested a positive link between group activities and quality of life, by enhancing the participation in group activities can improve the quality of life. The study also shows link between participation in group activities and reduced levels of stress, anxiety and depression. Therefore, intervention programmes that aimed at reducing stress, anxiety and depression during COVID – 19 can also be focused on the possibilities that youth may participate more in group and community-based activities by ensuring their personal safety and by strictly following COVID–19 protocol. The study suggests the need of community engagement programmes and group activities that have to be designed by adopting the requirements of prevailing COVID – 19 epidemiological situation. On the basis of findings of the study, attempt to increase family interaction may reduce the stress level among young adults. Therefore, it is important to appreciate family relationships and interaction among family members which will enable the young adult to express their needs, worries, concerns, wants and issues to each other and thus to relieve stress.

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Conflict of Interest

The author declared no conflict of interest.

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