



COVID19 Pandemic: Perspective on Quality of life

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Abstract

Introduction: Globally COVID-19 pandemic impacted on all dimensions of the lives in the world. Quality of life measures person's well-being. Very less information was available about the influence of COVID-19 pandemic

on quality of life. Thus, objective was to assess impact and change in lifestyle related factors contributing to quality of life among employed population due to COVID-19 pandemic.

Methodology: Web based cross sectional study was conducted among >18 years of study participants. Convenient sampling method was used. Data analysis was done using Epi info software 7.2.2 version.

Results: A total 252 study participants completed the study. COVID-19 pandemic impact was severe on physical domain 114(43.51%) and on psychological domain 20(7.63%). Over all the effect of pandemic on quality of life was moderate 136(51.91%). 234(89.31%) participants responded that there was excellent change in lifestyle related practices.

Conclusion: COVID-19 pandemic had moderately affected quality of life in our study subjects, along with excellent change in lifestyle related practices. Studies in huge population will be required to verify these findings.

Keywords: COVID-19; Pandemic; Impact; Quality of life; Lifestyle

DOI Number: 10.14704/nq.2022.20.8.NQ44840

NeuroQuantology 2022; 20(8): 8171-8177

Introduction

COVID-19 pandemic is a public health concern caused by SARS COV 2. (Gopalan & Misra, 2020) COVID-19 has hit many countries leading to severe losses due to strict social distancing orders. The financial crisis has not only affected individuals but also countries. It is difficult to predict the post-crisis consumption and recovery due to disastrous impact on industries. (Martin et al., 2020)(Guo et al., 2020) Previous pandemics has a profound impact on physical and mental health as well as quality of life. It has not only attacked the vulnerable group but also healthy lives in world. (Repišti et al., 2020)

COVID-19 pandemic has influence on various dimensions of health of population. Psychologically, the quality of life of an individual is governed by their individual matter. It indicates presence of well-

being of a person. One's perceptions about their position in life, cultural values, interests, goals, expectations can be assessed by this measure. Quality of life is influen-

ced by multiple factors such as physical, psychological, interpersonal relationship, and environment. (Chwaszcz et al., 2020) (Lardone et al., 2020) (Saladino et al., 2020)(Marzouqi et al., 2021)

The nationwide lockdown has resulted in restriction of physical activity of the individuals. (Lesser & Nienhuis, 2020) This lockdown due to COVID-19 pandemic might have resulted gain in weight, due to lack of physical activity and consumption of snacks and energy dense foods. (Gopalan & Misra, 2020) Reduced physical activity, increased sedentary behaviour results in deterioration of chronic health conditions. Potential

challenge to physical activity were restriction in acces-



store recreational centres, parks, work from home, and flexible lifestyles. Social isolation, financial instability, loss of job and child care challenges, has disturbed various parameters of well-being. (Lesser & Nienhuis, 2020) It is important to understand how the population deals with this catastrophe. (Zhang & Ma, 2020) Currently, there is no more information available about the COVID-19 pandemic and its impact on quality of life. Outcome of this pandemic is unpredictable. So, keeping this in view the objectives of study were to assess the impact and the change in lifestyle related factors contributing to quality of life due to COVID-19.

Material & Methods:

Study design: Online cross-sectional study

Study period: December 2020 – May 2021

Sample size: In study of Liu X et al (Liu et al., 2021) there was 16.5% moderate to severe depression, considering 5% alpha error and 10% allowable error and the calculated sample size is 212. Total sample size in our study was 252 based on the responses received during the study period.

Study population:

- a) Participants aged 18 years & above
- b) Those having access to social media platforms – WhatsApp, Facebook and telegram

Results and discussion:

Table 1: Distribution of study subjects as per sociodemographic variables

Variables	Frequency	Percentage
Gender Male	116	44.27
Female	146	55.73
Education		
Middle school	2	0.76
High school	12	4.58
Intermediate or post high school	23	8.78
Graduate/Post graduate	139	53.05
Professional or honours	86	32.82
Occupation		
Professional	189	72.14
Semi-professional	15	5.73
Skilled	26	9.92
Clerical/shop owner	27	10.31
Unemployed	5	1.91

Procedure:

A cross-sectional online survey was done with help of Google forms maintaining anonymity of the study participants. A pre-validated questionnaire was circulated using social media platforms such as WhatsApp groups, Telegram and Facebook. Online consent was taken for the survey. Questionnaire consists of 3 sections – sociodemographic profile, factors contributing to quality of life 4 domains: socioeconomic, physical, psychological, health related and lifestyle related precautionary practices followed during pandemic. Scoring system was developed for assessing these practices. Contributing factors for Quality of Life will be graded on a scale from 0 to 3 where –

0 – No change

1 – Mild change

2 – Moderate change

3 – Severe change in quality of life of the individuals

The changes in lifestyle or daily activities will be scored as follows:

0 – 3 = Fair change

4 – 7 = Good change

8 – 11 = Excellent change

Statistical analysis: Epi-

info software was used for data analysis



Marital status	Married	155	59.16
	Never married	102	38.93
	Separated/Divorced	5	1.91
Working sector	Government	52	19.85
	Private	139	53.05
	Non-profit organization	10	3.82
	Selfemployed	61	23.28

Sociodemographic variables of study subjects are reflected in table1. The percentage of females (55.73%) was slightly higher than the males (44.27%) and 59.16% of participants were married. Majority were

completed their graduate/postgraduate qualification (53.05%). Overall, 72.14% of the participants were professionals; majority (53.05%) were working in private sector, 23.28% were self-employed while 19.85% were involved in government jobs.

Table 2: Distribution of study subjects according to COVID-19 pandemic impact on quality of life

Domain	Frequency	Percentage(%)
Physical domain		
No change	5	1.91
Mild	38	14.50
Moderate	105	40.08
Severe	114	43.51
Socioeconomic domain		
No change	14	5.34
Mild	122	46.56
Moderate	106	40.46
Severe	20	7.63
Psychological domain		
No change	3	1.15
Mild	120	45.80
Moderate	119	45.42
Severe	20	7.63
Health related domain		
No change	37	14.12
Mild	163	62.21
Moderate	54	20.61
Severe	8	3.05
Overall impact		
No change	8	3.05
Mild	76	29.01
Moderate	136	51.91
Severe	42	16.03

Table 2 depicts the distribution of study subjects according to COVID-19 pandemic impact on quality of life in terms of various domains. Overall COVID-19 pandemic has affected quality of life moderately (51.91%). Among 43.51% and 7.63% study subject

physical and psychological domain was severely affected respectively. Impact was mild on socioeconomic and health related domain in 46.56% and 62.21% study participants respectively.



Table 3: Distribution of change in lifestyle related practices due to COVID-19 pandemic

Change in lifestyle	Frequency	Percentage
Excellent	234	89.31
Good Fair	24	9.16
	4	1.53

As shown in table 3, 89.31% of the participants responded that there was an excellent change in life style related practices due to COVID pandemic. Cross sectional study was conducted using google questionnaire to assess COVID-19 pandemic impact on quality of life among ≥ 18 years of populations. In this study, people’s perspective about quality of life during pandemic was assessed. Along with the factors contributing to quality of life, lifestyle related practices were also taken into account to find out the impact of this pandemic. In the present study, more than half of the participants i.e. 55.73% were females 59.16% of the participants were married. 53.05% of the study subjects were well qualified with higher degrees. Majority of the participants i.e., 53.05% were private sector employee, 23.28% were having their own business and 19.85% were working in the government sector. Due to the nationwide lockdown, most of the private sector employee were working from home and had increased internet access than usual. (Y. Kumar & Yadav, 2020) Similar socio-demographic details were reported in a web based study conducted by Mahendrakumar et al (M. Kumar & Dwivedi, 2020). Most of the participants (43.51%) in our study reported that there was a severe impact of COVID-19 pandemic on physical domain. Similar findings are reported by other studies. Mahendrakumar et al (2020) (M. Kumar & Dwivedi, 2020) in their study observed a significant change in exercise habits as compared to pre lockdown period. Before COVID-19 lockdown period, 42% of the participants agreed that frequency of exercises more than 3 times in a week is reduced to 22%. Iris A. Lesser (Lesser & Nienhuis, 2020) stated that various restrictions made by government had potentially influenced physical activity. They have observed a difference between inactive and active participants. 40.5% of inactive participants were involved in less physical activity and 40.3% of active participants in more physical activity since COVID-

19. Prolonged stay at home can change the behaviours that lead to physical inactivity stated by Peijie Chen et al. (Chen et al., 2020) In our study there was a mild impact on socioeconomic domain (46.56%), participants agreed that there was disruption in the family income, restriction in the social access as well as access to food. This is in accordance to study conducted by Mahendrakumar et al. (M. Kumar & Dwivedi, 2020) where around half of the responders felt social isolation as they had to stay inside due to lockdown. Majority of participants (64.6%) agreed on receiving great support from friends and (63.9%) from relatives were the findings depicted by Y. Zhang et al (Zhang & Ma, 2020). Our study reports mild to moderate (45%) impact on psychological domain while 7% participants reported severe impact. In an online survey conducted by Cuiyan Wan et al (Wan et al., 2020) in China, the psychological impact was moderate to severe as reported by more than half of the participants. Anjali Miglani et al (2020) (Miglani, 2020) in their study observed that there were some negative influences on mental health domain. In a study by Mahendrakumar et al (2020) (M. Kumar & Dwivedi, 2020), 52% participants felt socially isolated as a result of lockdown. Some recent studies support this finding as negative psychological changes were experienced by people during lockdown. On the other hand, Zhang et al (Zhang & Ma, 2020) reported that 52.1% subjects were. They were more concerned about their mental health and started spending extra time in recreational activity and exercising which helped them to deal with the stress. Around 62% participants in our study stated that there was a mild impact on health-related domain. This is in accordance with the results of Mahendrakumar et al (M. Kumar & Dwivedi, 2020). 65% participants agreed for having good access to fundamental requirements such as food and healthcare. (Y. Kumar & Yadav, 2020) In our study, according to people’s perspective, the over-



rall impact was moderate. We also assessed the change in lifestyle due to pandemic. This change in lifestyle related practices was excellent (89.31%) as compared to the pre-covid period. Similar finding is reported by Cuiyan Wanget al(2020)(Wanget al.,2020), majority of participants agreed that they followed specific precautionary measures during the pandemic (eg. hand hygiene, wearing a mask, covering mouth while coughing and sneezing etc.).

According to people's perspective, the overall impact was moderate in our study. We also assessed the change in lifestyle due to pandemic. This change in lifestyle related practices was excellent (89.31%) as compared to the pre-covid period. Similar finding is reported by Cuiyan Wanget al(2020)(Wanget al.,2020), majority of participants agreed that they followed specific precautionary measures during the pandemic (eg. hand hygiene, wearing a mask, covering mouth while coughing and sneezing etc.).

Conclusion:

In our study, quality of life was impacted moderately by COVID-19 pandemic along with excellent change in lifestyle related practices. Large population-based studies would be needed to support our study findings. Policymakers can develop effective public health interventions and strategies to ascertain the well-being of people. Data was collected through google form using social media platform, which limits accessibility to a larger population. Also study findings cannot be generalized as study sample in the research were highly educated, more affluent and professionals.

References:

Chen, P., Mao, L., Nassis, G. P., Harmer, P., Ainsworth, B. E., & Li, F. (2020). Coronavirus disease (COVID-19): The need to maintain regular physical activity while taking precautions. *Journal of Sport and Health Science*, 9(2), 103–104. <https://doi.org/10.1016/j.jshs.2020.02.001>
Chwaszcz, J., Palacz-Chrisidis, A., Wiechetek, M., Bartczuk, R., Niewiadomska, I., Wośko, P., & Sławska, P. (2020). Quality of life and its factors in the COVID-19 pandemic situation. Results of Stage 1 studies during the pandemic growth period. <https://doi.org/10.31234/osf.io/ryv8g>

Gopalan, H. S., & Misra, A. (2020). COVID-19 pandemic and challenges for socio-economic issues, healthcare and National Health Programs in India.

Diabetes & Metabolic Syndrome: Clinical Research & Reviews, 14, 757–

759. <https://doi.org/10.1007/s00134-020-05991-x>. Bizzarro

Guo, Y., Shen, M., Zhang, X., Xiao, Y., Zhao, S., Yin, M., Bu, W., Wang, Y., Chen, X., & Su, J. (2020). Association

of Socioeconomic Changes due to the COVID-19 Pandemic with Health Outcomes in Patients with Skin Diseases: Cross-

Sectional Survey Study. *Journal of Medical Internet Research*, 22(9), e22288–

e22288. <https://doi.org/10.2196/22288>

Kumar, M., & Dwivedi, S. (2020). Impact of Coronavirus Imposed Lockdown on Indian Population and their Habits. *International Journal of Science and Healthcare Research*, 5(2), 88–97. www.ijshr.com

Kumar, Y., & Yadav, B. C. (2020). COVID-19: A Life Changing Pandemic. *International Journal of Science and Healthcare Research*, 5(3), 189–192.

Lardone, A., Sorrentino, P., Giancamilli, F., Palombi, T., Simper, T., Mandolesi, L., Lucidi, F., Chirico, A., & Galli, F. (2020). Psychosocial variables and quality of life during the COVID-19 lockdown: a correlational study on a convenience sample of young Italians. *PeerJ*, 8, e10611–e10611. <https://doi.org/10.7717/peerj.10611>

Lesser, I. A., & Nienhuis, C. P. (2020). The impact of COVID-19 on physical activity behavior and well-being

of Canadians. *International Journal of Environmental Research and Public Health*, 17(3899), 1–

12. <https://doi.org/10.3390/ijerph17113899>

Liu, X., Zhu, M., Zhang, R., Zhang, J., Zhang, C., Liu, P., Feng, Z., & Chen, Z. (2021). Public mental health problems during COVID-19 pandemic: a large-scale meta-

analysis of the evidence. *Translational Psychiatry*, 11(1), 384. <https://doi.org/10.1038/s41398-021-01501-9>

Martin, A., Markhvida, M., Hallegatte, S., & Walsh, B. (2020). Socio-Economic Impacts of COVID-19 on Household Consumption and Poverty. May, 1–30. <https://doi.org/10.1007/s41885-020-00070-3>

Marzouqi, A. Al, Jarrar, A. H., Habib-mourad, C., Jamous, D. O. A., Id, H. I. A., Sabbah, H. Al, Id, H. H., Stojanovska, L., Hashim, M., Elhameed, O. A. A., Obaid, R. R. S., & Elfeky, S. (2021). Impact of COVID-



19 on mental health and quality of life
: Is there any effect? A cross-

sectional study of the MENA region. 1–

17. <https://doi.org/10.1371/journal.pone.0249107>

Miglani, A. (2020). Effect of Lockdown during COVID-19 : An Indian Perspective. *International Journal of Science and Healthcare Research*, 5(3), 55–61.

Repišti, S., Jovanović, N., Kuzman, M. R., Medved, S., Jerotić, S., Ribić, E., Majstorović, T., Simoska, S. M.,
Novotni,

L., Milutinović, M., & Stoilkovska, B. B. (2020). How to measure the impact of the COVID-19 pandemic on quality of life : COVID-19-QoL – the development , reliability and validity of a new scale. *Global Psychiatry*, 3(2), 1–10. <https://doi.org/10.2478/gp-2020-0016>

Saladino, V.,

Algeri, D., & Auriemma, V. (2020). The Psychological and Social Impact of Covid-19: New Perspectives of Well-Being. In *Frontiers in Psychology* (Vol. 11). <https://www.frontiersin.org/article/10.3389/fpsyg.2020.577684>

Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C. S., & Ho, R. C. (2020). Immediate Psychological Responses

and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-

19) Epidemic among the General Population in China. *Int. J. Environ. Res. Public Health*, 17(1729), 1–

25. <https://doi.org/10.1093/qjmed/hcaa110>

Zhang, Y., & Ma, Z. F. (2020). Impact of the COVID-19 pandemic on mental health and quality of life among




local residents in Liaoning Province, China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(2381), 1–

12. <https://doi.org/10.3390/ijerph17072381>

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