

COVID -19 Pandemic: Perspective on Quality of life

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Abstract

Introduction:

The COVID-19 pandemic has a profound impact on all aspects of the lives of societies in the world. Quality of life is a measure that can express a person's well-being in a pandemic situation. There is very less information about the impact of COVID-19 pandemic on the quality of life. Thus, the objective is to assess the impact of COVID-19 pandemic on quality of life among the employed population and to study the change in lifestyle related factors contributing to quality of life.

Methodology: Cross sectional web-based study was conducted from December 2020 - May 2021 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. The impact of COVID-19 pandemic was severe on physical domain 114(43.51%) and on psychological domain 20(7.63%). Overall impact of COVID-19 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 overall moderate impact on quality of life in our study subjects, along with excellent change in lifestyle related practices. These findings would need to be verified in larger population.

Keywords: COVID-19, Pandemic, Impact, Quality of life, lifestyle

Key messages: COVID-19 pandemic had moderately affected quality of life with severe impact on physical domain along with excellent change in lifestyle related practices.

INTRODUCTION

SARS-COV-2 responsible for COVID-19 pandemic is a global public health concern.(1) COVID-19 has led to severe and acute losses in many economies around the world due to illness and government-mandated social distancing orders. The impact and duration of the economic crisis on individual households, resulting from the pandemic, is difficult to predict as many uncertainties surround the crisis duration, i.e. length of "stay-at-home" orders, as well as impacted industries and the post-crisis consumption and recovery.(2)(3) Evidence from previous large-scale health outbreaks suggests that this type of event has a tremendous impact not only on physical health, but also on mental health and quality of life in general. This affects the whole population, both healthy people and those considered as vulnerable groups.(4)

The COVID-19 pandemic has a profound impact on all dimensions of health of population in the world. From a psychological perspective, the quality of life of an individual is determined by their subjective matter. Quality of life indicates a person's well-being or its absence. The assessment is made through the person's perceptions of their position in life, in their cultural context, values, and relative to their interests, goals, expectations, and standards. Quality of life is influenced by multiple factors such as interpersonal relations, life environment, psychological and physical state.(5)(6)(7)(8)

The nationwide lockdown has resulted in restriction of physical activity of the individuals.(9) This lockdown due to COVID19 pandemic might have resulted gain in weight, due to lack of physical activity and consumption of snacks and energy dense foods.(1) Reduced physical activity, increased sedentary behaviour results in deterioration of chronic health conditions. Potential challenges to physical activity, restriction in access to recreation centre and non functioning of city parks and playgrounds, work from home opportunities to engage in flexible lifestyles might have permitted to incorporate more physical activity into daily living. Social isolation, financial instability, loss of job and childcare challenges, may impact various well-being outcomes for the population.(9)

It is important to understand how the population is coping with such a major disaster.(10) Currently, there is no more information available about the impact of COVID-19 pandemic on the quality of life. This is especially pertinent with the uncertainty surrounding an outbreak of such unparalleled magnitude. So keeping this in view the objectives of study were to assess the impact of COVID-19 pandemic on quality of life and to study the change in lifestyle related factors contributing to quality of life.

Subject and Methods

Study design: Cross sectional web-based study

Study period: December 2020 – May 2021

Sample size : In study of Liu X et al(11) 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.

Procedure:

A cross sectional online survey was done with help of Google forms maintaining anonymities of the study participants. A pre-validated questionnaire was circulated using social media platforms such as WhatsApp groups, Telegram and Facebook. On-line 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. The questions related to factors contributing to Quality of Life will be graded on a scale from 0 to 3 where -

- '0' will be considered as 'No change'
- '1' will be considered as 'Mild change'
- '2' will be considered as 'Moderate change' and
- '3' will be considered as '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: Data was analysed by epi-info software version 7.2.2.

RESULTS

Table 1 : Distribution of study subjects as per sociodemographic variables

Variables	Frequency	Percentage
Gender		
Male	116	44.27%
Female	146	55.73%
Educational status		
Middle school	2	0.76
High school	12	4.58
Intermediate or post high school	23	8.78
Graduate/Post graduate	139	53.05
Profession 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
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
Self employed	61	23.28

Table 1 shows the sociodemographic profile of study participants. 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 impact of COVID 19 pandemic 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 impact of COVID 19 pandemic on quality of life in terms of various domains. In this study, based on the responses from the participants, the overall impact of COVID-19 pandemic on their quality of life was moderate (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	24	9.16
Fair	4	1.53

As shown in table 3, 89.31% of the participants responded that there was an excellent change in lifestyle related practices due to COVID pandemic.

Discussion

A cross sectional web-based study was conducted using google questionnaire to assess the impact of COVID-19 pandemic on quality of life among 18 years and above population. 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 considered 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.(12) Similar socio-demographic details were reported in a web based study conducted by Mahendra kumar et al(13).

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. Mahendra kumar et al (2020)(13) 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 >3 times in a week is reduced to 22%. Iris A. Lesser(9) in their study stated that public health restrictions would potentially influence physical activity behaviour at multiple levels. Their results demonstrate the differences between inactive and active participants with 40.5% of inactive participants reportedly engaged in less physical activity and 40.3% of active participants reporting more physical activity since COVID-19. A study conducted by Peijie Chen et.al, it is suggested that prolonged home stays can change the behaviours that lead to inactivity. (14)

We observed a mild impact of COVID-19 pandemic 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 Mahendra

kumar et.al. (13) where around half of the responders felt socially isolated as they had to stay inside due to lockdown. Majority of participants (64.6%) agreed that they received increased support from friends and (63.9%) from family members were the findings depicted by Y. Zhang et al(10), .

In our study, the impact on psychological domain as perceived by most of the participants was mild to moderate (45%) but around 7% participants reported severe impact on the psychological domain. In an online survey conducted by Cuiyan Wang et al(15) in China, the psychological impact during the initial phase of COVID-19 outbreak was moderate to severe as reported by more than half of the participants. They used Impact of Event Scale-Revised (IES-R) to assess the psychological impact. Anjali Miglani et al (2020)(16) in their study observed that there were some negative mental health impact of the COVID-19 pandemic during lockdown period. In a study by Mahendra kumar et al (2020)(13), 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 the period of lockdown. On the other hand, Zhang et al(10) in their study reported that more than half of the participants (52.1%) felt horrified and apprehensive due to the COVID-19 pandemic but they did not feel helpless. They were paying more attention to their mental health, spending more time relaxing, resting and exercising after the onset of the pandemic which might have helped them to cope with other negative impacts on mental health like increased 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 Mahendra kumar et al(13) where majority(75%) have changed their eating habits than usual due to change in the routine dietary pattern of people. Since lockdown preparing more food stuff and varieties was noted. 65% participants agreed for having good access to basic necessities like food and health care during the lockdown.(12)

In our study, according to people's perspective, the overall impact of COVID-19 pandemic on their quality of life was moderate (51.91%). We also assessed the change in lifestyle due to pandemic. This change in lifestyle related practices was found to be excellent (89.31%) as compared to the precovid period. Similar finding is reported by Cuiyan Wang et al (2020)(15), majority of the 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:

COVID-19 pandemic had moderate impact on quality of life in our study subjects, along with excellent change in lifestyle related practices. Still COVID-19 pandemic is ongoing and these findings would need to be verified in larger population studies. The study provides insights for regulatory bodies and policymakers for developing effective policy interventions to ensure the well-being of people during this pandemic. 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.

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