

Psychological aspects of covid -19 on general population

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Abstract

Aims: To study the psychological aspects of covid-19 in general population.

Objectives: To detect any abnormal psychological behavior amongst general population.

Materials and Methods: These are a prospective randomized observational study. Inclusion criteria- Indian, age > 18 years who is able to understand Hindi and Gujarati, Gynecologists, gynecology nursing staffs, servant staff, infertility patients. The questionnaire contained within stress scale, anxiety disorder, depression, and mental well-being scale separately. The

questionnaire was formed in English, Hindi, and Gujarati Language.

The investigation questionnaire comprised of the following tools:

- The Warwick-Edinburgh Mental well-being scale
- Anxiety disorder scale
- Perceived stress scale

Results: A total of 92 responses were collected during the survey, there are 56 participants are male, and 34 are female. The average Perceived stress scale score of the study described that about 45 % of participants reported moderate stress and 35% of respondents felt low stress.

Generally, in the major areas, most of the respondents informed no change, in such negative emotions as sorrow 27%, nervousness 29%, irritability 28%, frustration 43.4%, and distress and anxiety 13%, aloneness 65%. While few of respondents reported an increase in feelings of Distress of anxiety 67%, Distress of death 59%. Alternative 20-35% of respondents described a failing of these negative emotions.

Conclusions: To conclude, the current survey suggests that more than two-fifths of people suffer from anxiety and depression, due to the blockade and the current COVID19 pandemic.

Keywords: psychological, COVID-19, Gynecology

Introduction

The novel Coronavirus is an infectious disease, later known as COVID-19 that has spread to humans around the world. The novel coronavirus was founded in Wuhan, China in December 2019^[1]. It later became known as an epidemic in early 2020 that spread around the world and led to serious public health problems^[2]. Following to this worldwide health emergency, lockdown and quarantine actions were executed by the government and health organizations to stop the quick spread of the virus. The succeeding steps were included such as avoidance of mass gatherings, compulsory usage of face masks, social distance, teleworking or working from home, and online education^[3]. As the coronavirus epidemic spreads rapidly worldwide, it is causing some psychological impacts such as significant fear, anxiety, and anxiety in large populations, especially in certain groups, such as the elderly, health care providers, and people with underlying health conditions^[4].

To fight against the rapid rise in cases in India and to prevent community spread, a nationwide "lockdown" was proclaimed beginning at midnight on March 25, 2020, for

a period of 21 days, which was later extended until May 3, 2020, with the assurance that basic requirements of the general population would be met.

The term "lockdown" refers to an emergency protocol that prohibits people from traveling from one location to another. Complete lockdown also indicates that people should stay put for the time being, with no more entry or leave movements permitted. It can be used as a preventative as well as an emergency technique to save the lives of people who are vulnerable or at risk. All educational institutions, shopping malls, factories, offices, and local marketplaces will be affected in this scenario^[5]. Also Public transports are completely closed except hospitals, police stations, emergency services such as fire stations, gasoline pumps and grocery store^[5]. When the social gap is an important public health solution to resolve the spread of Covid19, many affected countries have also applied public spaces effectively.

Though the term lockdown can become crucial and gives a high distancing mechanism to control the transmission of the extremely infectious Covid19 virus, as it can have psychological consequences for the wider population^[6]. During immediate isolation in the context of a pandemic is known to be associated with a wide range of mental health problems^[7]. It included such as fear, depressive symptoms, confessional disorder, somnolence, anger disturbance, and others, followed by subsequent stress disorder symptoms^[8].

Depending on the age range, lockdown can have a variety of outcomes^[9]. At home, it may be challenging to keep the kids entertained throughout the day. For the parents, this might be a source of anxiety. Others would avoid meeting the elderly due to their vulnerability to COVID-19 infections, which may be a substantial source

of distress for both the elderly and their family members [10].

Also, according to recent research reports, the rapid pursuit of the lockdown by the government has created many obstacles for economically disadvantaged people [11]. Therefore, the present research was designed to assess the psychological effects of lockdown on the general public in order to measure the anxiety, stress, and psychological problems associated with COVID19 infection in India.

Materials and methods

For this research there was a systematic questionnaire has been prepared and for the same, a cross-sectional survey was conducted using Google forms. The questionnaire has been sent to 100 people that consenting adults aging 18 years and /or older of the general population including infertility patients, Gynecology patients, nursing staff, servant staff, and Gynecology doctors. A survey link was distributed through social media. The questionnaire contained within stress scale, anxiety disorder, depression, and mental well-being scale separately. The questionnaire was formed in English, Hindi, and Gujarati Language.

The investigation questionnaire comprised of the following tools:

- Demographics and individual characteristics:
- Questionnaire about patient health
- The Warwick-Edinburgh Mental well-being scale
- Anxiety disorder scale
- Perceived stress scale

Demographics and individual characteristics

The general information such as gender, age, marital status, education, present work profile has been included in the general sheet.

To assess the impact of Covid 19 on the relationship and how Covid 19 had affected people's feelings, emotions, and behaviours with family/ friends/neighbours/ office staff in various aspects of life, etc. are included in the questionnaire.

Questionnaire about patient health

The patient wellness/ Health questionnaire (PHQ) is the Depression Component, which scores each of the 9 measures in the Diagnostic and Statistical Manual. This questionnaire consumes commendable Consistency and rationality, understanding and specificity of major depression.

The Warwick-Edinburgh Mental well-being scale

The Warwick-Edinburgh Mental well-being scale has been used here for further study. The scale was determined by adding the score of all the 14 matters such as eudemonic and hedonic characteristics of mental health.

Anxiety disorder scale

The anxiety disorder scale helps to define and represent the minor, modest, and severe anxiety stages for generalized anxiety disorder (GAD). Increasing scores on the scale are closely related to many areas of functional impairment. Although symptoms of GAD and depression frequently coexist, factor analysis has confirmed them to be separate aspects. Furthermore, GAD and symptoms of depression have different but independent effects on functional impairment and disability. There is good agreement between the self-reported and interviewer-administered versions of the scale.

Perceived stress scale

The perceived stress scale measures the degree to which life situations are perceived as stressful. Here the Elements are designed to exploit the impact of Covid 19 and overwhelmed reactive people find their lives during

those periods/ lockdowns. The scale also includes several direct questions about current perceived stress levels. The questions were general in nature and therefore relatively unspecific to a small population. The Perceived Stress Scale (PSS) questions ask about feelings and thoughts over the past month. It is full of psychometric properties. For this investigation, we reduced the time period to 30 days.

Results

A total of 92 responses were collected during the survey, there are 56 participants were male, and 34 were female. About 60 participants were married and 24 participants were unmarried while the details were not received from the 8 participants. Regarding educational qualifications, most of the participants had completed graduate studies. There were 20% of participants who had completed post-graduation studies. The widely held participants were employed. Regarding occupations, less than half 48 % of the respondents were health care (Doctors, Nurses) workers. At the current level of work during the Covid 19, about 22% of respondents did not go to work, and 35 % of respondents were worked from home while 48% of respondents were working as usual.

Table 1: Socio-demographic Contour

Table 1	
Socio - demographic profile (n=100)	
Variables	Frequency (%) / mean (SD)
Sex	
Male	58
Female	34
Marital status	
Married	60
Unmarried	24
Widowed/Divorced/separated	3
Details not available	5
Educational qualification	
Graduate	60
Postgraduate	20
Diploma	12
Occupation	
Self-employed	25
Employed in government sector	20
Employed in private sector	35
Home maker	10
Retired	2
Profession	
Doctor	10
Nurse	38
Engineer	12
Lawyer	0
Businessman	25
Retired	2
Teaching	5
Others	0
Level of working	
Not going to work	22
Work from Home	35
Doing work as usual	48

The average Perceived stress scale score of the study described that about 45 % of participants reported moderate stress and 35% of respondents feel low stress after the start of the LOCKDOWN due to Covid 19 period. The average GAD7 score was 3.7 (and about 25% of the respondents were classified in the severity category of moderate symptoms. The average PHQ9 score for participants was 4.1, by the majority of participants reporting 75% moderate depressive

symptoms, while 50 % reported mild depressive symptoms, with only a few participants. The average of Warwick Edinburgh Mental Well-being Scale (WEMWBS) score for the research participants was SD 7.8. When the risk of sadness or depressive cut-off is high about 83% of participants. Comparing the level of anxiety, depression, stress, and well-being between HCW and non-HCW found that about half of the respondents were health workers 48% while 44% respondents are 44% non HCW. As compared the data of HCW and non-HCW also found that related to non-healthcare workers, health care workers had a significantly higher average PHQ9 score, a higher rate of suffering from depression when describing mild depression, and a lower rate of poor mental health. All the related are details are shown in Table 2.

Table 2: Stress, anxiety, depression, mental health perceived during Covid 19

Table 2				
Stress, anxiety, depression, mental health perceived during Covid 19 & comparison of variables between Non-HCW and HCW				
Variables	Whole sample (n=100) Mean (SD)/frequency (%)	Non-HCWs (n=44), n (%)	HCWs (n=48), n (%)	t-test/Mann-Whitney U-value/Chi-square test (P)
Severity of stress				
Low stress	35	25	10	0.284541765
Moderate stress	45	10	35	
Severe stress	12	1	11	
Mean GAD-7 score, range (median)	3.7	3.6	3.4	
Severity of anxiety				
Mild	20	15	5	0.130585911
Moderate	45	2	43	
Severe	25	5	20	
Mean PHQ-9 score, range (median)	4.1	4.2	3.9	
Severity of depression				
Mild	50	44	5	0.45282646
Moderate	75	20	55	
Severe (≥20)	25	7	18	
Mental well-being score	7.8	7.9	7.60	
Participants with WEMWBS score	92	50	42	
Overall prevalence				
Percentage(%) of responders reporting GAD score	83	44	39	0.096281038
Percentage(%) of responders reporting PHQ Score	71	36	35	
Percentage(%) of responders reporting only GAD score & PHQ Score	68	63	29	
Percentage(%) of responders reporting GAD score + PHQ score	31	21	10	

This survey found an average of 68% had no changes in their behaviour with their family members. While the ratio of improvement found same with family and in their behaviour are in order to with family and Neighbors. This table also shows the details of worsened behaviour with Family/Friends/Neighbors/colleagues.

Table 3: Impact of Covid 19 on Behaviour with Family/Friends/Neighbors/colleagues

Table 3				
Impact of Covid 19 on Behaviours with Family/Friends/Neighbours/colleagues				
Variables	Frequency (%)			
	No change	Slightly improved	Marked improved	Slightly worsened
Behaviour with family members	68.478261	21.73913	0	10.869565
Behaviour with your spouse/partner	60.869565	9.7826087	7.6086957	21.73913
Behaviour with children	80.434783	3.2608696	13.043478	3.2608696
Behaviour with parents	86.956522	5.4347826	2.173913	5.4347826
Behaviour with your neighbors	54.347826	21.73913	6.5217391	17.391304
Behaviour with your office colleagues	92.391304	7.6086957	0	0

of Distress of anxiety 67%, Distress of death 59%. Alternative 20-35% of respondents described a failing of these negative emotions. A noticeable increase in social media use was reported by about 81% of respondents. With reference to somatic symptoms, sleep, appetite, and fatigue, a slight increase of these characteristics was observed. Many of participants reported a noticeable increase in activities such as exercise, faith in God, watching movies, indoor gaming, cooking, and in household work.

Generally, in the major areas, most of the respondents informed no change, in such negative emotions as sorrow 27%, nervousness 29%, irritability 28%, frustration 43.4%, and distress and anxiety 13%, aloneness 65%. While few of respondents reported an increase in feelings

Table 4: Impact of Covid 19 on Emotions

Table 4				
Impact of Covid 19 on Emotions				
	No change	Increased	Decreased	Cannot say
Sadness	27.173913	21.7391304	16.3043478	34.7826087
Anxiety	29.3478261	38.0434783	17.3913043	15.2173913
Irritability	28.2608696	19.5652174	38.0434783	14.1304348
Frustration	43.4782609	27.173913	29.3478261	0
Loneliness	65.2173913	10.8695652	21.7391304	2.17391304
Social isolation	32.6086957	54.3478261	13.0434783	0

Fear and apprehension	13.0434783	67.3913043	0	19.5652174
Fear of death	32.6086957	59.7826087	0	7.60869565
Sleep	21.7391304	32.6086957	45.6521739	0
Fatigue	38.0434783	48.9130435	13.0434783	0
Exercise	25	38.0434783	0	36.9565217
Use of social media	10.8695652	81.5217391	7.60869565	0
Faith in god	27.173913	59.7826087	13.0434783	0
Watching movies	38.0434783	43.4782609	10.8695652	7.60869565
Internet gaming	10.8695652	10.8695652	0	78.2608696
Playing indoor games	10.8695652	56.5217391	0	32.6086957
Spending time with family	5.43478261	48.9130435	32.6086957	13.0434783
Reading books	16.3043478	40.2173913	13.0434783	30.4347826
Cooking	21.7391304	48.9130435	15.2173913	14.1304348
House hold work	43.4782609	45.6521739	10.8695652	0

Table 5: Stress due to coronavirus disease-19 infection

Table 5		
Stress due to coronavirus disease-19 infection		
Variable	Yes	No
Be frightened getting infected with Covid 19	84.78	15.21
Hopelessness	48.91	51.08
Nonappearance of emotional response - happiness or sadness	70.65	29.34
Feeling fatigued	54.34	45.65
Concentrated awareness or feeling confused or unable to reflect clearly	40.21	59.78
Sensitivity separated from others	92.39	7.6
Continuously have on mask and defending equipment in open places	97.82	2.17
Participate widely held of free time reading	52.17	47.82
Participate widely held of free time in watching Covid 19 related information	43.47	56.52
Anxiety when dealing with patients/family members	38.04	61.95
Anxiety when dealing with neighbour	27.17	72.82
Felt angry or irritated on self/others/family members	32.6	67.39
Had distress falling asleep	53.26	46.73
Doubt for frequent infection control procedures	75	25
Scared to go to home for the reason that of fear of infecting others	94.56	5.43

Failing of work performance	78.26	21.73
Unhappy attitude - feeling truncated most part of the day	70.65	29.34
Rejection in neighborhood for the reason that of hospital work/being kept in a quarantined facility	76.08	23.91

Discussion

In the absence of other ways to escape the COVID pandemic, almost all countries have adopted the barrier/lockdown strategy as a potentially effective strategy to fight against COVID19. India was also quite early in its response to impose the lockdown already within 2 weeks of the declaration of COVID19 as a pandemic. While this strategy is an important measure to deal with the exponential increase in COVID cases, it has a widespread impact on the public's economy, psyche, and daily life [12]. In this regard, the present study aimed to assess the psychological impact of the blockade on the general public with the aim of assessing fear, perceived stress and psychological issues related to the blockade due to the COVID19 pandemic in India.

The prevalence rates of depressive symptoms and anxiety symptoms based on the PHQ9 and GAD7 cut-off scores [13].

Comparison of our results with those of the National Mental Health Survey (NMHS) shows that the psychiatric morbidity of common mental illnesses could be higher in the study than the estimated prevalence [14]. It can be argued that the significantly higher prevalence of psychiatric morbidity in the present study compared to the NMHS could be due to the use of different sampling methods and the use of screening tools, but the screening tools were found to have high sensitivity and specificity for the diagnosis made by mental health professionals [15]. Hence, the difference in rates prevalence cannot be entirely attributed to the difference in methodology. Therefore, it is possible that the lockdown period resulted

in a significant increase in mental morbidity of generally lower intensity in the general public. The prevalence of anxiety found in the present study is comparable to the prevalence rate of depression is lower. The current survey was conducted at the start of the outbreak in the country, which was conducted near the peak of the outbreak. The association between depression and a longer duration of lockdown was also observed in the present study, which could be an indicator of an increased prevalence of depression with an increase in the number of COVID19 infection cases [16]. The prevalence of mild to moderate anxiety and depression among 45 % of survey participants indicates that the pandemic and lockdown are having a major impact on the mental health of people in the country and suggest the urgent need to address it [17]. The Indian Psychiatric Society has been working towards this from the early stages of the Covid 19, providing all medical assistance free of charge to people seeking mental health care.

In the existing examination, in general, the majority of the individuals mentioned the tremendous effect of the lockdown on the connection size in phrases of courting with parents, children, spouses, colleagues, and neighbours [18]. The advanced courting might be attributed to the provision of extra loose time, much fewer paintings stress, and viable success of lengthy favoured loose time. Findings of the existing examine are mentioned tremendous elements of lockdown is development in relationship and own circle of relative's relationships. However, the advanced courting dimensions can also be attributed to the truth that, while

everybody is preventing a not unusual place enemy, the interpersonal courting problems are forgotten, which is likely pondered as advanced relationships^[19]. Another reason behind the advanced courting might be a worry of death, which regularly makes humans understand themselves as weak, and hence, have much less initiative to fight with others. However, with inside the interpersonal size, there has been found the increasing bad feelings together with sadness, loneliness, tension, frustration, and worry and apprehension^[20]. These findings once more aid the viable thriving in the superiority of despair and tension, with inside the wake of the pandemic. When requested approximately the COVID-19 infection consistent with the individuals mentioned the presence of signs and symptoms associated with practicable COVID-19 infection to be stressful. Some of the opposite mentioned regions for which a full-size share of individuals mentioned full-size strain had been a worry of having inflamed with COVID-19 infection, constantly wore masks and the defensive system even in open spaces. Also, the majority in their time analysing or looking COVID 19 associated facts, had tension while handling febrile patients/own circle of relative's members, emotions of pessimism or hopelessness, feeling in different from others, feeling exhausted and had problem falling asleep/common awakenings, averting. COVID-19- associated information, having tension/ palpitations, deterioration with inside the paintings overall performance, and a few experiencing stigma and rejection because of their career associated with HCWs or because of being quarantine. All those findings mirror the concern of contamination of contracting COVID-19^[21]. While the concern of contracting COVID-19 may be taken into consideration as justified, thinking about the global mortality and

contamination rates, however, those can also be attributed to the problems together with media hype and winning myths associated with COVID-19 contamination.

The existing examination found that 48 % of participants were active in health and when the prevalence of psychiatric morbidity was confronted with health workers, a slight depression was also included (that is, saying. Some of the other reported areas where a large percentage of participants reported a significant stressor were fear of being infected with COVID19 infection, always wearing masks and protective clothing even in open spaces, spending most of their time reading or watching COVID- related facts, having family anxiety/fever, feelings of pessimism or hopelessness, feeling detached from others, feeling exhausted, and having trouble falling asleep experience stigma and rejection due to their occupation as COVID-related healthcare professional or being quarantined^[22]. All of these findings reflect the fear of contracting COVID19. Although the fear of contracting COVID19 could be considered justified, given the death and infection rates around the world, these could also be attributed to issues such as widespread media hype and myths related to the virus. This survey has certain limitations. Despite attempts to disseminate it widely on all possible social media platforms, wider participation was expected. Therefore, it can be said that the response rate to the survey was low. About half of the participants were doctors and nurses. Most of the participants were university graduates but perhaps influenced by the higher percentage of participants who were physicians. The survey was limited to people with access to a smartphone. However, given the situation, it was the best possible methodology to reach people to understand the

psychological impact. These limitations suggest that the results may not be generalizable to all sectors of society.

Conclusions

To conclude, the current survey suggests that more than two-fifths of people suffer from anxiety and depression, due to the blockade and the current COVID19 pandemic. This finding suggests that mental health services need to be extended to all members of society during this pandemic situation.

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