Exploring Psychological Ramification of 2019-n CoV Pandemic

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ABSTRACT

This study is designed to unmask psychological consequences of the ongoing pandemic situation COVID-19 among general public during and after period. As we all are very acquainted with the course of action of this virus and how speedily it converted from epidemic to pandemic, therefore, it is necessary to comprehend the psychological picture of the current scenario. The main aim of the study is to analyze psychological disorders on the basis of demographic profile of the respondents. For the purpose of this study, a survey method was used to collect the data. A sample of total 219 participants was collected through online mode with the help of self-administered questionnaire, the data was analyzed with the help of SPSS Package. Different statistical calculations used to meet the aim of the study as per the requirements of the data such as Descriptive statistics & percentages. Chi-square test was applied to compare responses based on gender, age, and the level of education, to find possible statistical correlations. The results indicates that pandemic situation increase psychological disorders in respondents. The responses of the respondents regarding psychological consequences during pandemic were similar on psychological consequences of COVID during pandemic.

Keywords: Pandemic, mental health, psychological ramification, psychological consequences, 2019-n CoV.

INTRODUCTION

The COVID-19 pandemic has not only affected our physical health but has also left a profound impact on our psychological well-being. The global crisis, marked by prolonged periods of uncertainty, fear, and isolation, has unleashed a range of psychological consequences that have reverberated across individuals, families, and communities. The psychological consequences of

COVID-19 have presented a formidable challenge to global mental health. The pandemic's impacts, including heightened anxiety, social isolation, depression, Post-Traumatic Stress Disorder (PTSD), and substance abuse, have underscored the importance of prioritizing mental well-being alongside physical health. While navigating the post-pandemic world, this research delves into the psychological consequences of COVID-19, examining the toll it has taken on mental health.

At present, due to availability of little literature of review on the psychological impact and mental health of the general population during the extreme of the 2019 –n CoV pandemic & considering the present pandemic situation that has taken a psychological toll on the population mental health, it has become need of an hour to understand its psychological and behavioral consequences. The aim of present study is to know about the psychological consequences faced by the Indian population after outbreak of 2019 –n CoV pandemic.

LITRATURE REVIEW

Corona viruses belongs to a large family of viruses that can infect human beings as well as animals. An animal coronavirus can revamp that can infect persons and flatter in to a personage coronavirus. There are seven types of coronaviruses in which four types i.e. 229E, NE63, OC43, and KHU1 are habitual and cause mild to moderate respiratory infections, like the common cold. Another two types i.e. Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) and Middle East Respiratory Syndrome coronavirus (MERS-CoV) can cause severe respiratory infections. The 7th type 2019 -n CoV is a new coronavirus recently detected in Whuhan city Chine. 2019 -n CoV is also known as noval coronavirus is a new coronavirus exertions that no-where found in humans previously. Corona viruses symptoms generally appear 2-14 days after exposure that causes respiratory symptoms cause various symptoms such as pneumonia, fever, breathing difficulty, and lung infection kidney failure, or even death. The reported symptoms include fever, cough, fatigue, pneumonia, headache, diarrhea, hemoptysis, and dyspnea runny nose, and phlegm-producing cough (Huang, C. et.al. 2019, Li, Q.et.al 2020,). Patients with mild symptoms were reported to be usually recovered after one week while severe cases were reported to experience progressive respiratory failure due to alveolar damage from the virus, which may lead to death. Cases resulting in death were primarily middle-aged and elderly patients with pre-existing diseases i.e. tumor

surgery, cirrhosis, hypertension, coronary heart disease, diabetes, and Parkinson's disease (Li.T et al, 2020). Despite the perplexity and uncertainty of COVID-19 not only intimidate wellbeing, but also pretentious in humans mental health extremely in term of emotions and cognition. As per Behavioural Immune System theory, people may develop negative psyche i.e. aversion, anxiety etc. and negative cognitive estimation for self-care or self-protection (Mortensen, C.R. et al 2010, Ackerman, J.M. et al 2009, Schaller, M.et al. 2008, Schaller, M. Parasites, 2006). Physiognomy with potential disorder ultimatum human being turns to expend avoidant behaviors i.e. avoid contact with people who have pneumonia like symptoms and obey social norms strictly i.e. conformity (Houston, V. and Bull, R ,1994, Schaller, M.et al 2015). Due to shortages of health equipments like shortage of masks and hand sanitizers pandemic 2019 –n CoV persuading panic and a convenient be aware of mental or psychological health of well beings in the community (Xiang, Y.2020). Earlier investigations disclose extreme and wide range of psychosocial impacts on well being at the individual, community, and international levels during outbreaks of infection. On an individual level, people are likely to experience fear of falling sick or dying themselves, feelings of helplessness, and stigma (Hall, R. and Chapman, M., 2008). At the time of influenza outbreak, about 10% to 30% of general public were very or fairly worried about the possibility of contracting the virus (Rubin, G.J et al. 2008). With the closure of schools and business, negative emotions experienced by individuals are compounded (Van B.T.2016) with the outbreak of pandemic people feared of going to market places, concerned with their family member and felt under confident, increased level of anxiety, fear of safety due to social media with the current infection control measures (Balkhi F. et.al 2020). The consequences of covid pandemic are not mere physical illness, yet affected many lives at personal, professional and societal levels, resulting anxiety, mental trauma, mass hysteria, stress & fear from the people around (S. Devi, 2020).

OBJECTIVE

The main objective of the study is to understand the psychological disorders among masses due to covid 19 during pandemic period.

HYPOTHESIS

The study has framed hypotheses that response of the respondents regarding psychological consequences faced during pandemic is independent of their age. In other words, opinion of all the respondents is similar on psychological consequences of COVID during pandemic.

METHODOLOGY

The study has adopted an online survey design to obtain the opinion of the respondents with regard to psychological disorders appeared during the pandemic of 2019-n CoV by using questionnaire of Balkhi et al., 2020. This questionnaire contains 25 questions with two sections. First section of questionnaire consisting participant's characteristics i.e. Gender, age, qualification and occupation. Another section of questionnaire consisted 21 questions concern about the pandemic regarding severity, personal efforts, and satisfaction regarding governmental efforts to fight. Each question offered two options i.e., "yes" and "No" for obtaining therespondents on statement measuring psychological disorders. The first part of the questionnaire focused on the assessment of psychological consequences i.e., fear, fear experienced while leaving their house, visiting a crowded place, felt anxious etc regarding 2019 –n CoV. Second part of questionnaire concentrated on measuring change in their behaviour during i.e., whether they limit their physical contact, avoid prayer places / healthcare facilities or cancel their personal and family plans to come out from the fear of 2019-n CoV. In addition to above statements indicating participant's hygiene like frequently hand washing, use of hand sanitizer and use of mask, was included in the questionnaire to measure their response towards appropriate behaviour during pandemic.

For conducting online survey, the google format of questionnaire was uploaded/share in the what's app group and the members were requested share it in their other groups. The study has received responses of 219 participants who were contacted through online survey because due to pandemic it was not possible to direct contact to the respondents. The profile of the sample indicated that respondents across India participated in the online survey and range of the age of the respondents was found between 15 years to above 45 years. The educational qualification of the participants are 10th to PhD. Occupation profile of the participants were form service background, students, business men and home maker. The survey was analyses on the basis of demographical profiles of the respondents to find out real and authentic results.

STATISTICAL ANALYSIS

The data was analyzed using statistical test i.e., Chi-square test, which was applied to check homogeneity in the opinion of the respondents based on their demographic profile i.e., age, education, occupation and gender. Further p value of <.05 was considered statistically significant.

RESULT AND DISCUSSION

Psychological consequences related responses of ongoing pandemic on the basis of demographic profile:

Result table 1 depicts the demographic profile and other characteristics i.e. gender, age, qualification and occupation of the participants. Total 219 participants are participated in online survey and submitted their responses. Therefore on line survey across India have been done. From these 219 participants, 37% are male and 63% are female with the age range of 15 to above 45 years. In terms of age group, out of total 219 participants, 125 (57.1%) are in the age group between 15 to 25 years, 34 (15.5%) within the age group of 25 to 35 years, 36 (16.6%) are in the age group ranging between 35 to 45 were and 24 (10.9%) are above 45 years of the age. The educational qualification of the participants is : undergraduate 43 (19.6%), graduate 70 (31.9%), post graduate 57 (26.0%), M.Phil. 9 (4.1%), doctorate 35 (15.9%) and having other qualification were 5 (2.28%). Occupation profile indicates that the participants having job 67 (30.6%), students are 129 (58.9%), business 10 (4.6%) and home maker were 13 (5.9%).

TABLE -1

Demographic Profile

Characteristics	Variable	N (%)
Gender	Male	79 (37%)
	Female	140 (63%)
Age	15-25	125 (57.1%)
	25-35	34 (15.5%)
	35-45	36 (16.4%)

	Above 45	24 (10.9%)
Qualification	12	43 (19.6%)
	Graduation	70 (31.9%)
	Post Graduation	57 (26.0%)
	M.Phill	9 (4.1%)
	Ph.D	35 (15.9%)
	Others	5 (2.28%)
Occupation	Job	67 (30.6%)
	Student	129 (58.9%)
	Business	10 (4.6%)
	Home Maker	13 (5.9%)

TABLE 2

Psychological Consequences related responses and value of Chi-Square on Age, Education, Gender and Occupation

Statement	Yes	No	Age (p value of chi-square)	Education (p value of chi-square)	Occupation (p value of chi-square)	Gender (p value of chi-square)
HLF	139(63.5%)	80(36.5%)	5.760(.124)	3.273(.658)	1.269(.736)	.843(.359)
Visit CP	172(78.5%)	47(21.5%)	6.921(.074)	6.883(.230)	5.301(.151)	.000(.988)
FEAR SH	197(90%)	22(10%)	6.836(.077)	4.185(.523)	1.265(.738)	.248(.618)
HFM	101(45.2%)	118(54.8%)	9.500(.023)	11.905(.036)	8.909(.031)	7.092(.008)
FMO	174(79.5%)	45(20.5%)	1.432(.698)	4.548(.474)	13.349(.004)	.379(.538)

ADB	145(66.2%)	74(33.8%)	5.923(.115)	9.463(.092)	4.994(.172)	7.665(.006)
GIP	201(92%)	18(8%)	.768(.857)	2.612(.760)	16.744(.001)	3.228(.072)
UCIMS	155(70.7%)	64(29.2%)	8.400(.038)	12.087(.034)	9.022(.029)	2.311(.128)
FNSM	187(85.3%)	32(14.6%)	.347(.951)	.325(.997)	.757(.860)	.378(.539)
SP	123(56.1%)	96(43.8%)	.296(.961)	4.092(.536)	2.417(.491)	.011(.916)

The objective of the study is achieved analyzing psychological disorders of the respondents faced during the pandemic period. Further, the analysis is done on the basis of demographic profile of the respondents to observe the homogeneity in the responses of the respondents with the help of chi-Square test. In other word, this test is applied to check whether psychological disorders of the respondents appeared during pandemic is independent of the demographic factors i.e., Age, education, gender and occupation. In this way, the study has made an attempt to test the hypotheses that there is no association between the demographic factors and psychological disorders encounterby the respondents during pandemic.

Analysis of survey based on: Age

❖ The respondent's response regarding statement i.e., "I Fear leaving my house because of Cov.19 (HLF)." across age, was analyses with the help of chi-square test and the result of the test indicates that the fear of leaving house during pandemic was present among all the respondents, the p value .124 indicates acceptance of null hypothesis i.e., presence of fear of leaving house during pandemic was common among all the respondents of all the age groups. The presence of fear leaving house may be due to high probability of being affected because of their weak immune system, uncertainty of medical treatment and social distancing is the preventive measure of curing COVID-19. The result of the study pointed out that the significant percentage of the respondents were found agreed with the statement that they fear leaving their houses (HLF) because of Covid-19, i.e., 67.7 % in 15-25 age group, 53 % in 25-35 age group, 58.3% in 35-45 and 70.8% in above 45 age group were found agree with statement they faced of leaving house. The largest percentage of the respondents shows evidence of presence of the fear among respondents of all age groups

during pandemic period. The study has noticed the similar results were noticed with regard to statement i.e., "Visiting the Crowded Place i.e., Market (VISIT CP) as the p value is .74, which is more than significance level i.e., .05..ence it is concluded that a fear of visiting crowded place was observed among all the age group.The result of different age group shows avoidance of visiting crowded places due to probability of being affected from COVID-19. The age group founded agreed from 15-25 were 76.3%, age 25-35 68%, 83.3 % in 35-45 age and 95% in above 45 were found agree with statement of visiting crowed places like market, malls, departmental store. The study concluded that Covid -19 spreadfear among all age groups and it is independent of age. Therefore, null hypothesis i.e. fear of visiting crowded places is not rejected.

❖ On the statement "I fear for safety of my health even when I am at home (FEAR SH), the corresponding p value i.e., .077 indicates not rejection of null hypothesis i.e., there is noassociation between age and fear for the safety of health even when they are at home. This indicates, higher level of anxiety and fear across allage group even staying at home. They feel fear of safety of their own health.The study observed that the anxiety and fear among all respondents across the age group. However, 96% respondents agreed presence of fear regarding their safety and health even staying at home is in the age group of 15-25 years were 91.3%, age 25-35 years were 93.7%, 35-45 years were 91.6% and above age 45 years were 75 %. This indicates that uncertainty about safety and health even at home was concerned of all the respondents during pandemic.

❖ The study with regard to "the fear for the health of family members (HFM)" and age of the respondents, corresponding p value .023 that reflects rejection of null hypothesis i.e. age of the respondents and fear about the family members are closely associated. It was observed on age group 53.5% in 15-25year, 46.8% in age 25-35years, 33.3% in age 35-45 years and in age above 45 years 25% were found in the statement that there is a fear for the health of the family members during pandemic.

❖ During pandemic period there was a rising trend of +ve cases of COVID globally. Visiting outside was very risky and high probability of getting affected form COVID. On the statement that "I feel anxious when a family member goes outside the house (FMO)", the p value1.432 failed to

reject null hypothesis there is no association between above said statement and the age of respondents. In this statement study observed that in age group between15-25 year 80.3%, 25-35 years were 71.8% and above 45 years were 83.3% This indicates that anxiety was observed among all respondents i.e. parents and their children's when they goes outside, and similarly among children's when their parents goes outside. In other words, the level of uncertainty covid-19 pandemic equally affected one of the family members goes outside.

❖   The constant anxiety level of the respondents and age is independent of each other. It is noticed that age and daily anxiety were found independent to each other because p value .115 >.05, which indicates non rejection of null hypothesis. The study observed that 71.6% respondents (15-25 years) claimed daily anxiety level during pandemic, age group 25-35 years reported 56.2% agreed with the statement that they faced high level of anxiety, 35-45 years age group indicated 66.6% agreement with the statement and in above 45years age group 50% admitted daily anxiety level during pandemic period. The highest percentage i.e.71.6 % was found among the youth with regards to the statement measuring anxiety and stress during pandemic period. The higher percentage of anxiety level may be due to they were confined to stay at their home and educational institutes were closed and their moments was restricted the social and physical distancing, lockdown and access of negative news on social media etc.

❖   The respondents were questioned whether government should isolate Covid-19 patients (GIP) to specific hospital for the treatment of covid patients. The homogeneity of the responses on above said statement across age was not found equal because p value is .85>.05. The respondents ofdifferent age group hold similar opinion with respect to isolation of Covid -19 patient in specific hospital by the government. This may be due to extra care and specialattention is required for the treatment of covid patients. More than 90% respondents in the age group 15-25year, 25-35years, 35-45 years, werefound agreed on the said statement i.e., Special hospital should be established for the treatment of covid patients. A slight less percentage i.e. 87.5% were found in the age group above 45% for making separate hospitals for COVID patients.

❖   The different results were observed with regard to "feeling of under-confident with the current infection control measures (UCMIS)" taken by the concerned authorities as the p value is .038 which is less than .05(.038<.05) as a result null hypothesis is rejected i. e. there is no homogeneity among the respondents of all age group feels that they are under-confident with regards to institutional arrangement made by government for controlling spread of covid-19. This may be lack of public awareness about standard operating procedure and protocol with regards to the pandemic among higher age group. The age group 15-25 years hold different opinion compared to other age group on this statement i.e. feeling of under confident with the current infection control measures initiated by the government. This age group was not satisfied with the initiatives taken for the control and speared of covid-19 virus.

❖   During covid-19 flow of messages and views appeared on the social media which may cause panic situation among the masses. The corresponding p value above statement i.e. fake news surfacing on social media regarding pandemic among the masses (FNSM). The study observed p value .951 which proves that homogeneity among the response of the respondents on this statement. The opinion on this statement it was found that all age group holds similar opinion regarding fake news on social media. The study found no association on the opinion with regards to appearance of fake news on social media. As a result, it has created more panicsituation during the pandemic period and also affected stress and anxiety of the masses. More than 80% respondents were found with the statement flow of messages and views appeared on the social media caused panic situations.

❖   The similar results were observed on the statement i.e. situation is not as bad as it is being portrayed (SP) as its p value.961 is more than significance level .05., which proves feeling of the respondents about gravity of the COVID virus. They perceived that gravity of the problem is not as that as it is being portrayed. They might have framed there opinion on the basis rumors appearing on the social media with regards to financial assistance likely to be extended by the WHO, therefore the situation is being portrayed as a critical situation with no proper medical advice and treatment.

❖ **Responses on the basis of demographic: Education**

The study has evidence similar results in case of education level of the respondents regarding psychological consequences of covid-19 during pandemic period, as the p value is more than .05 on the statement HLF, VISIT CP, FEAR SH, FMO, ADB, GIP, FNSM and SP. But in case of p value on HFM and UCIMS was found less than .05. As a result, it is concluded that respondent's opinion was found similar on the statement where p value is more than .05 i.e."the fear for the health of family members (HFM)" i.e..036 <.05and holding different opinion if p value is less than .05 i.e. "feeling of under-confident with the current infection control measures (UCMIS)" (.032<.05).

❖ **Responses on the basis of demographic: Occupation**

The occupation profile of the respondents has also presented the similar findings regarding psychological consequences during covid 19 pandemic except statement such as FMO and GIP the opinion of the respondent not found similar on above said statements. The p value on the statement i.e. "government should isolate Covid-19 patients to specific hospital for the treatment of covid patients(GIP)", the null hypothesis was not accepted as p value is less than .05 (.029<.05). With regards to FMO the homogeneity was not found on the statement i.e.,feel anxious when a family member goes outside the house (FMO)". The opinion of the respondent who are doing job and students hold different opinion compare to business and home maker. The students and respondents doing job were more concerned about the health and safety of their family members who needs to go outside for performing duties etc.

❖ **Responses on the basis of demographic: Gender**

The study has also shown similar results on the statements except ADB. The opinion of male and female is not similar to each other as the p value is .005 which is less than. 05,. this indicate that the anxious level observed during pandemic period is not independent to gender as gender influences the daily anxiety level among the respondents. The opinion is influenced by the gender of the respondents. 87.7% females claimed that they suffered constant anxiety and stress during the COVID period, however 72% males who claimed that they experienced stress anxiety and fear

during pandemic. Hence it is concluded that more percentage of women agreed on the statement i.e. presence of anxiety, stress and fear during pandemic in their life.

CONCLUSION

The consequences of the COVID-19 pandemic have been wide-ranging and impactful. The pandemic has had a profound impact on mental health. The fear and uncertainty surrounding the virus, coupled with social isolation, have contributed to increased rates of anxiety, depression, and stress-related disorders. Individuals have also experienced grief and trauma due to the loss of loved ones or the experience of severe illness.

The present study has concluded that psychological disorder appeared during COVID-19 pandemic as there is no association in presence of psychological disorder and demographic profile of the respondents. However, the study has observed on some statements measuring some psychological disorders and association with the demographic factors. The study confirms presence of psychological disorder during pandemic period, therefore, health wellness and psychological counselling session should be initiated for physical and mental health for the citizens. In this way a better care may be extended for living healthy life style during and post pandemic period.

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