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Well being and mental health among COVID-19 recovered patients

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ABSTRACT

Backgrounds: Covid-19 is an infectious disease caused by the newly discovered coronavirus. Covid-19 virus is spread mainly through saliva droplets or runny nose when an infected person coughs or sneezes. COVID-19 has changed the lives of people all over the world in amazing ways. Coronavirus was first discovered in Wuhan, China in December 2019 and was originally named acute respiratory syndrome coronavirus 2. Mental health denotes emotional, psychological, and social well-being. Positive mental health and positive psychology have an imminent role to play during this unprecedented public health crisis. Although there is enough evidence-based literature on the application of positive mental health techniques at individual level for stress reduction or life fulfilment, its application in a pandemic scenario is minimally explored. Happiness strategies classically outlined in Lyubomirsky's book "The How of Happiness" revolve around (a) living in the present, (b) managing stress (which is outlined later in this article), and (c) investing in social connections. Mindfulness meditation practice daily helps in quieting one's mind and prevents the constant internal mental chatter. This is additionally proven to focus your attention on the present moment and a lot of existing research has proven the efforts of its practice in maintaining and nurturing improved mental health.
Methods: To obtain the sample group, official permission was taken from the authorities in changes from different places from Ahmedabad city, Gujarat. Followed by a brief rapport, an informed consent was obtained from each subject promising confidentiality and anonymity. The tool was then administered after giving relevant instructions and ensuring that the subject has understood them. Privacy and comfortable atmosphere were ensured throughout the data collection. All the subjects were thanked for giving their valuable time and consent to participate in the study. After completion of data collection, a response of each respondent on the entire tool was scored with the help of respective scoring keys.

Results: we tested the F-ratio (see Table 1). For the gender (male and female) we got $F=4.634$, $p < 0.00001$. In age (20-30 years and 40-50 years) we got $F= 19.23$, $p< 0.12$, also the interaction between gender and age $F= 1.593$, $p<0.17$, In Warwick Edinburgh Mental Well-being Scale the gender i.e. our first source of variance which is significantly associated on >0.01 level of significance. So, our hypotheses on type of person were rejected on WEMWBS Scale. The age group of the people and the gender having the source of variances with significantly associated on 0.05 level of significance.

Keywords: Covid-19, emotional, psychological, and social well-being,

INTRODUCTION

Covid-19 is an infectious disease caused by the newly discovered coronavirus. Covid-19 virus is spread mainly through saliva droplets or runny nose when an infected person coughs or sneezes (Zhou et al., 2020). The virus enters the body through the nose, mouth and eyes. Some recent research suggests that the virus can be spread through the air and can be spread by positive infected (Holmes et al., 2020) airborne droplets in air-conditioned enclosures, AC offices, buses, shopping malls and theaters due to the lack of air passing through, even when in direct contact with an infected person. It is important that, after recovery, a person manages his or her health in such a way that he or she is in a good state of mind.

COVID-19 (Ornell et al., 2020) has changed the lives of people all over the world in amazing ways. Coronavirus was first discovered in Wuhan, China in December 2019 and was originally named acute respiratory syndrome coronavirus 2 (SARS-CoV-2). On January 30, 2020, as the first cases were reported in India and the other states, the World Health Organization named Coronavirus disease 2019 (COVID-19) and declared it a global public health emergency. Three months after the announcement of the global epidemic COVID-19, in India there were 216229741 cases known as COVID-19 and 4496681 confirmed deaths due to COVID-19 till August 29, 2021. 26 out of 29 states were on some sort of lockdown by the middle of August 2021 and most states lifted them in September. The current study was conducted in August 2021, right at the midst of the lockdown in the India. Since then, the numbers have continued to rise; over 28 million people have contracted COVID-19 and over 4496681 people have died due to the virus in India (Johns Hopkins University and Medicine, 2021). State governments and health organizations continue to institute ways to respond to mitigate the spread of the virus, but equally important are people's psychological well-being as they cooperate with these mitigation efforts. Moreover, while addressing the strictly biological component is critical, addressing the mental health of populations and understanding their coping behaviours through this period is equally crucial.
Mental health denotes emotional, psychological, and social well-being Positive (Fredrickson, 2009) mental health and positive psychology have an imminent role to play during this unprecedented public health crisis. Although there is enough evidence-based literature on the application of positive mental health techniques at individual level for stress reduction or life fulfilment (Flett *et al.,* 2018) its application in a pandemic scenario is minimally explored.

Happiness strategies classically outlined in Lyubomirsky's book "The How of Happiness" revolve around (a) living in the present, (b) managing stress (which is outlined later in this article), and (c) investing in social connections. Similarly outline strategies of broadening your thinking, raising your positivity-ratio, and disputing negative thinking (Zollars *et al*., 2019) and fear (which is obvious during pandemics) greatly assist in maintaining wellbeing at its highest levels.

Mindfulness meditation (Roulston *et al.,* 2018) practice daily helps in quieting one's mind and prevents the constant internal mental chatter. This is additionally proven to focus your attention on the present (Oken, *et al.,* 2018) moment and a lot of existing research has proven the efforts of its practice in maintaining and nurturing improved mental health. For example, the student population has greatly benefitted from a mindfulness course in terms of improved wellbeing, decreased stress, and increased resilience. Similar benefits were noted in diverse populations such as older adults, adolescents, and educators. A systematic review and another meta-analysis found that mindfulness-based stress reduction (MBSR) was effective in reducing stress, depression, anxiety, and distress and in improving the quality of life of healthy individuals (Hébert and Kane, 2018)

The role of religion and prayer in reducing stress cannot be overemphasized such that studies have proven that prayer plays a significant role which is no less than meditation and other mind–body techniques (Lomas *et al.,* 2017) in reducing stress. Social connections (some of which are explained later) have shown proven associations between long-term well-being , and this could be practiced in a 'lockdown' environment by way of telephonic, message, and video-contact with family, friends, and colleagues. It is normal to feel anxious and stressed during the COVID-19 outbreak. We all have a role to play in protecting the physical and mental health of ourselves and others. Know the facts about COVID-19 and help to support positive mental (Sharma and Rush, 2014) well-being. The main aim of the present research work

was to assess the level of mental health and well-being of the recovered patients from Covid-19

The following hypotheses were proposed:

1. There will be no significant difference between age and gender at the level of mental health and well-being.
2. There will be no significant difference between gender and mental health the level of mental health and well-being.
3. There will be no significant difference between age and mental health the level of mental health and well-being.
4. There will be no significant difference between gender and wellbeing the level of mental health and well-being.
5. There will be no significant difference between age and well-being the level of mental health and well-being.
6. There will be no significant differences between age, gender, mental health and well-being.

MATERIAL AND METHODS

Participants

To measure well-being and mental health of a recovered covid-19 patients; sample were selected total of 150 subjects were approached, 120 subjects gave consent to proceed. Out of 150 subjects 120 subjects were selected who fit into the criteria and who have completed the questionnaire appropriately. No detailed information is available for patients who did not participate in the study. In the present study The range of age of the sample were 30-40 years and 50-60 years, and the data analyses were undertaken for n = 120 (60 are males and 60 are females). The distribution of gender is in equal proportion. The distribution of genders are in equal proportion.

Measures

The aim of the resent research study is to assess the level of mental wellbeing among covid-19 recovered patients in both male and female by using the Warwick Edinburgh Mental Well-being Scale by Sarah Stewart Brown. It is a 14-item questionnaire measuring global Mental Well-being. The age range of this scale can be construct on the Mental Well-being for all age groups. The items are rated on a five-point Likert scale, ranging from (1) None of the time to (6) all of the time, where higher sum score on the scale indicates higher levels of global Mental Well-being. WEMEBS is found to be overall response rate was 53%. Of those who responded, 348 (98%) fully completed WEMWBS. For population samples r=0.51 and 0.75. these correlations are within the desired limits, which supports the validity of this global score.

Procedure

To obtain the sample group, official permission was taken from the authorities in changes from different places from Ahmedabad city, Gujarat. Followed by a brief rapport, an informed consent was obtained from each subject promising confidentiality and anonymity. The tool was then administered after giving relevant instructions and ensuring that the subject has understood them. Privacy and comfortable atmosphere were ensured throughout the data collection. All the subjects were thanked for giving their valuable time and consent to participate in the study. After completion of data collection, a response of each respondent on the entire tool was scored with the help of respective scoring keys.

Statistical Analysis

To further analyse the data, three way (2x2) ANOVA F-test was used. Descriptive statistics in the form of mean was computed.

Source of Variation	SS	df	MS	F	Level of Significance
Gender	725.208	1	725.2083	4.634	S
Age	3010.008	1	3010.008	19.23	S
Gender x Age	249.408	1	249.4083	1.593	NS
Error	18151.7	116	156.4802	--	--
Total	22136.33	119	--	--	--

*NS (Not Significant) / S (Significant)

RESULTS & DISCUSSION

All these scores were then analysed by adequate statistical technique of two-way analysis of variance to examine main and interaction effect of two independent variables. In the preliminary analyses, we tested the Fratio (see Table 1). For the gender (male and female) we got F=4.634, p < 0.00001. In age (20-30 years and 40-50 years) we got F= 19.23, p< 0.12, also the interaction between gender and age F= 1.593, p<0.17, In Warwick

Edinburgh Mental Well-being Scale the gender i.e. our first source of variance which is significantly associated on >0.01 level of significance. So, our hypotheses on type of person were rejected on WEMWBS Scale.

Scale. The age group of the people and the gender having the source of variances with significantly associated on 0.05 level of significance.

DISCUSSION

Epidemics and pandemics are a periodic (Khoury et al. 2015) phenomenon. People in the community face several tasks during such stages. Lack of awareness often leads to an unconcerned approach, which may poorly disturb the alertness to meet these challenges (Chirico et al., 2019) Impacts of these epidemics and pandemics are often forceful, which may adversely affect the psychological well-being of a given population (Nyqvist *et al.,* 2013) The psychological distress related to epidemics and pandemics also effect on the behavior of people in the community. Hence, this study attempted to evaluate the awareness, attitude, anxiety (Shankar *et al.,* 2015) and perceived mental healthcare needs in the society. All epidemics and pandemics have their unique characteristics in terms of causality, progression and control measures. It is crucial to provide health education and create awareness during such situations for effective prevention of disease spread (Allen, 2018).

Study also support the WEMWBS (Warwick Edinburgh Mental Well-being Scale) as a useful mental health screener during or after pandemic or the recovered patients of nCovid19 because as we know the government locked the whole country so the people got sheltered and some isolated because they had covid-19 positive; and they can't go outdoor and also have to maintain social distance from the family and friends. Crisis and unavailability of basic necessities specifically the food, physical appearance of the people etc. The poor people who having stress and anxiety for the availability of food, shelters to survive in this pandemic and those who had recovered covid-19 the had some fear in mind unconsciously and they can't be having extracurricular activities. Somehow on the other hand the old age group 40-50 years, in addition to symptom persistence and clinical sequelae that may last far beyond the initial COVID-19 illness, the extent of emotional and behavioural concerns and general distress (Mishra *et al*., 2020) for those affected has yet to be determined. A diagnosis of COVID-19, and subsequent need for physical distancing, has been associated with feelings of isolation and loneliness. COVID-19–related stigma has also become pervasive and can result in a sense of hopelessness. Increasing reports of lingering malaise and exhaustion akin to chronic fatigue syndrome may leave patients with physical debility and emotional (Galea *et al.,* 2020) disturbance. Compounded by the psychological toll of the pandemic experienced population wide, individuals recovering from COVID-19 may be at even greater risk of depression, anxiety, posttraumatic stress disorder, and substance use disorder. These combined effects have the potential to result in a global health crisis, considering the sheer number of COVID-19 cases worldwide.

CONCLUSION

Granted that no long-term data of substantial numbers of covid recovered patients with various presenting symptoms exist and with comparison groups, and that it is still early in the COVID-19 pandemic, it is possible that large numbers of patients has experienced long-term sequelae. Outpatient post–COVID-19 clinics are opening in many localities where large outbreaks have occurred, and the term "long-haulers" has been suggested to refer to these patients. It is imperative that the care of this vulnerable patient population take a multidisciplinary approach, with a thoughtfully integrated research agenda, to avoid health system fragmentation and to allow the comprehensive study of long-term health consequences of COVID-19 on multiple organ systems and overall mental health and well-being. Furthermore, such an approach will provide the opportunity to efficiently and systematically

conduct studies of therapeutic interventions to mitigate the adverse physical and mental health effects among hundreds of thousands, if not millions, of people who recover from COVID-19. Longer-ranging longitudinal observational studies and clinical trials will be critical to elucidate the durability and depth of health consequences attributable to COVID-19 and how these may compare with other serious illnesses.

Conflicts of interest: The authors stated that no conflicts of interest.

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