

"A Comprehensive Assessment Of The Psychosocial Impact Of Coronavirus Crisis Among General Population Of Aizawl, Mizoram"

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I. Introduction:

In December 2019, a new virus broke out in Wuhan, China, which later known as Coronavirus disease (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and became a global pandemic soon after causing million cases and million deaths. It is one of the deadliest virus in history. By June 20 2022, the World Health Organization (WHO) had reported 544,403,930 cases worldwide with 6,341,031 deaths and 519,753,612 recovered cases, affecting 228 countries and territories. With 88,004,073 cases, USA hold the highest COVID-19 cases, with India being the second highest with 43,311,049 cases (WHO, June 20, 2022). On January 27, 2020, India reported its first case of COVID-19 infection in Kerala, India, in which the Government declared a health emergency effectively. As a result of COVID-19 outbreak, situations like socio-economic crisis and psychological distress became a great concern, since among all, the general population are greatly affected. As Curfews, quarantines, social distancing, changes in daily activities and restrictions needed to be maintained for the prevention of spreading of Coronavirus, this in turn leads to a more stressful environment for the general population worldwide. The people became vulnerable to the emotional impact of COVID-19 and leading to many psychological problems and important consequences like depression, stress, anxiety, uncertainty to the future as COVID-19 cases seem to increase daily.

According to previous researches, common psychological impacts/reactions found related to mass quarantine generates fear, anxiety and depression arise immensely, especially with anxiety-provoking information received through the internet and social media. The psychological/psychosocial impact of COVID-19 outbreak may differ from country to country, as culture, beliefs and religion seem to differ as well.

On 24 March 2020, Mizoram reported its first case of Coronavirus infection with its first death reported on 28 October 2020. During the initial stages of COVID-19, it can be predicted that one-third respondents in Mizoram general population had a psychosocial impact. This indicates that a thorough systematic assessment needs to be conducted among the general population of Mizoram, focusing more on the psychosocial impact, which may help the people and the Government of Mizoram ways of coping and holistic intervention for the affected individuals.

The aim of this study was to use novel COVID-19 Pandemic Mental Health Questionnaire (CoPaQ) to assess and explore the psychosocial impact of COVID-19 crisis among the general population of Aizawl, Mizoram.

Aims And Objectives:

1. To explore the impact of coronavirus on psychosocial aspects of the general population.
2. To determine the association of perceived psychosocial distress of general population and selected demographic variables.

II. Methodology:

The present study was a community-based descriptive cross-sectional study conducted in the urban community of Aizawl, Mizoram, for a period of 1 month (April, 2022). The study followed the COVID-19 Pandemic Mental Health Questionnaire (CoPaQ), for assessing the psychosocial impact of COVID-19 among the general population in Aizawl.

Inclusion criteria:

- Age group : 18 years and above, both genders
- Those who are willing to participate

Exclusion criteria:

- History of any psychiatric illness or mentally unstable

Sample size:

Based on the current number of population in Aizawl ,i.e. 387,196(Based on 2022 statistics),a sample size of 400 was proposed. The sample size was calculated with the help of **Slovin's** formula:

$$n = \frac{N}{1 + Ne^2}$$

n = No. of samples

N = Total population (where N = 387196)

e = Error margin/ Margin of error

(In the present study, 0.05 at 98% confidence level was used)

Sampling technique:

No sampling frame was available for the population. Under the current pandemic situation, taking samples and meeting in person for the study was not feasible.Hence, convenience sampling technique was done for selecting the samples and all the available direct contacts meeting the inclusion criteria were included in the study

Tools:

Online , self-administered questionnaires were given through "Google form", the questionnaire includes the following:

- Socio-demographic proforma
- COVID-19 and Health related information
- Novel COVID-19 Pandemic Mental Health Questionnaire(CoPaQ)

Methods of data collection:

The present study was conducted by giving the questionnaires online "Google forms" in English to all the participants who meets the inclusion criteria. Due to the current pandemic situation, meeting the participants and interview was not feasible, hence, questionnaires were constructed in such a way that it can be easily answered and submitted via online. The informed consent and questionnaires were distributed in any ways possible according to the participants convenience i.e email,whatsApp, Telegram etc.

The demographic proforma and COVID-19 and health related information sheet were obtained and was well responded by the participants. *The COVID-19 Pandemic Mental Health Questionnaire (CoPaQ)* is a newly constructed and highly comprehensive self-report measure assessing the psychosocial impact of COVID-10 pandemic. A modified questionnaire based on the English long version of CopaQ questionnaire was used. The questionnaire consist of Socio-demographic background, and the impact on risk perception, affect, thoughts, behavior, mental health,media usage, institutional trust and social cohesion. It took around 15-20mins to complete the questionnaires. An ethical permission was taken from the ethical committee of Mizoram University before initiating the study.

Statistical analysis:

The data was compiled and analysed using Microsoft Office Excel 2007. Descriptive statistics were presented in the form of percentages for variables and median range (along with mean,mode and standard deviation wherever necessary) for continuous data. Arithmetic mean(Average) and correlation coefficient(r) was calculated via Microsoft Office Excel 2017 regarding the the association of perceived psychosocial distress of general population and selected demographic variables.

III. Results:

Baseline Socio-Demographic parameters:

A total of 400 samples participated among the general population of Aizawl,Mizoram. A baseline socio-demographic parameters has been shown in Table 1. Mean age of the participants was 32.00 (median=30.00), and 62.5% were female whereas 37.5% were male. Maximum of the participants (31.5%) are from Nuclear family and 42.5% are single(unmarried). Status of COVID-19 were included in the socio-demographic parameters where maximum (61.5%) mentioned they do not have any history related to COVID-19 signs and symptoms or were tested positive.

Psychosocial Parameters using novel COVID-19 Pandemic Mental Health Questionnaire (CoPaQ):

The psychosocial parameters using novel COVID-19 Pandemic Mental Health Questionnaire (CoPaQ) has been shown in table 2. According to the response of 400 participants, in Domain 11(level of worriedness) ,49% are worried of infecting themselves whereas 69% are worried that people close to them will die because of COVID-19. Domain 12 measures the maintenance of COVID-19 appropriate behavior(CAB) in which maximum of the participants claimed to follow and mentioned appropriate adherence to COVID-19 pandemic measures over the past two weeks(domain13). On domain 16(level of stress) , 65.25% showed that the current pandemic is giving them mental stress and worries them when symptoms of COVID-19 occurs randomly, 28% worries about the financial situations and uncertainties regarding jobs, training place, schools or studies. 27% are stressed out about what COVID-19 may bring to the future and inability to cope with everything. According to results found in domain 17 & 18 (Self-coping strategies and media awareness) , 33.75% reports that despite the present pandemic, they are hopeful that corona-crisis will soon be over and 40.75% mentioned that they have acknowledged and accepted the COVID-19 pandemic as reality. Among the participants, 31.5% carried out an increased amount of research about COVID-19 via internet and social media. Lastly, in domain 19(conspiracy regarding COVID-19) , 22.25% believed that COVID-19 pandemic and the effect it have is the effect of a struggle or competition between different superpowers as a biological weapon and that it may have served as a means to deliberately decreased the world population as there is not enough resources.

Association of perceived psychological distress and selected demographic variables:

For assessing the perceived psychological distress caused by COVID-19, a modified standardized tool – novel COVID-19 Pandemic Mental Health Questionnaire(CoPaQ) was used in which a standardized tool for assessing the psychological distress - DASS-21(Depression,Anxiety Stress scale-21) was also included in CoPaQ. For calculating the correlation/association of perceived psychological distress, a correlation coefficient(r) formula via Microsoft Office Excel 2017 was used. Correlation co-efficient in excel, the interpretation is regarding the coefficient value,which is always between -1 and +1, which measures both the strength and direction of the linear relationship between the variables. The larger the absolute value, the stronger the relationship in which +1 (positive correlation) indicates strong relationship, 0 indicates no relationship and -1 (negative correlation) indicates no/weak relationship. Hence, from the responses, the association of perceived psychological distress among the selected variables are calculated accordingly. From the functional parameters, it has been concluded that depression, emotional stress and anxiety have seen on both male and female equally in all aspects with a correlation coefficient value between +1 and +2. An increased impact on psychological distress was seen among those who have no history/status of COVID-19 and the participants who belonged to either nuclear or joint family. The same result was seen among those who are single or married (with a correlation coefficient value of +1) in all aspects of the functional parameters, mainly focusing on DASS-21 related questions.

IV. Discussion:

The COVID-19 pandemic has greatly impact the psychosocial aspects of people all over the world especially among the general population, as many are inexperienced and are unable to cope with the effects it have generally. This study is believed to be the first in Mizoram regarding assessing the psychosocial impact of COVID-19 among the general population by using novel COVID-19 pandemic menal health questionnaire (CoPaQ).

The results indicate that the level of anxiety related to risk perception was seen among majority of the participants although adherence and maintenance of COVID appropriate behavior was followed efficiently by the same population. Although certain traumas have been occurring in Aizawl, Mizoram, it is clear from the findings that mild depression, contamination anxiety,conspiration beliefs and OCD's behavior have been found among the population as a COVID-19 pandemic impact which till now may effect the livelihood of the people..

In the current study, the psychosocial impact of COVID-19 pandemic was assessed and association of perceived psychosocial distress and selected demographic variables was calculated. It was interesting to learn that almost all of the 400 participants considered it important to follow the COVID appropriate behavior (hygienic measures and social distancing) and have positive attitude towards the possibility of COVID-19 pandemic to be over soon despite their responses on the previously mentioned functional parameters. The attitudes of the participants in Aizawl may greatly highlight how much religion, lifestyle and culture of the country have vast impact on the findings. Despite the highly infectious state of the disease, this was a positive finding and rule out the importance of general awareness regarding COVID-19 pandemic and appropriate behaviours among the general population.

Sleep deprivation/nightmares due to the pandemic were experienced by few although the main stressor was found to be regarding financial crisis and uncertainty of the future although this will need further statistical analysis.

The modified standardized tool used (CoPaQ) covers a wide range of assessing the psychosocial impact of COVID-19 pandemic which are, COVID-19 infection status, impact on risk perception, affect, thoughts and behavior, media usage and conspiracy beliefs. However, the main limitation of this study was due to the scoring system which is yet to be validated by the those who formulate CoPaQ questionnaires. The correlations were calculated with Correlation coefficient via Microsoft Excel 2017, in which interpretations were done from the coefficient value (-1,0,+1).

V. Conclusion:

I came to the conclusion that the domains of mental health mainly affected by COVID-19 among the general population of Aizawl is that of anxiety and worry related to risk perception. The results and findings aim to contradict the beliefs of anticipating greater psychosocial distress among the participants with respect to affect, behavior, thoughts, media usage, institutional trust and conspiracy. However, the findings are found to be reliable and the psychosocial impact of COVID-19 among the general population are found to be accurate although further studies may be appropriate, focusing on other study groups or institutions with the use of novel CoPaQ questionnaire to assess the psychosocial impact of COVID-19 pandemic.

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