



Assessment of the Psychological Impact of Covid 19 Pandemic and Need for Problem Based Learning among Youth in Mysore City, Karnataka

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Abstract

The novel coronavirus (COVID-19) pandemic has influenced life in all aspects. The epidemic has brought not only the risk of death from infection but also unbearable psychological pressure. However, this needs new attitudes and behaviors that could shape our life; amongst the top ones are the capacity to learn through problem based learning (PBL). PBL is a method of finding a sound or practical solution to a certain problem through the process of conducting research. The PBL approach creates more critical thinking, problem solving, self-managed learning, adaptability, communication, interpersonal skills, and teamwork.

Objectives of this study is to assess the psychological impact of COVID 19 pandemic on youth population of Mysore city and to find whether there is any association between the psychological stress and change in behavior of the study population. Finally to determine the need for enforcing problem based learning for the youth population.

Methods: This is a cross sectional study using a semi structured online questionnaire (Google form). The convenience sample of youth aged between 15-29 years (National Youth Policy) from various disciplines contacted through their emails and WhatsApp. Participants' stress levels are being assessed using the Impact of Event Scale. Descriptive statistics used. Mean, and standard deviation and proportions used to estimate the results. Regression analysis used to assess the association between stress variables and change in behavior (outcome variable).

Results and conclusion: Around 13% of participants had severe stress due to the pandemic. The greatest fear was that important others or loved ones would get COVID-19 infection because of the participant and restricted mobility in my country because of the COVID-19 outbreak. Participants agreed that they avoided crowded places (82.5%) and washed their hands frequently (92.5%).

Keywords: COVID 19 pandemic; Psychological impact; Problem based learning

Introduction

The novel coronavirus (COVID-19) pandemic has influenced life in all aspects. Psychological impact of COVID 19 is more substantial than the medical impact. Number of people psychologically affected by the pandemic is more than the number of people infected [1]. Studies showed that a direct, dose dependent relationship exist between stress levels and change in behaviours due to the pandemic. The main sources of stress were fear of contracting infection, restricted mobility due to the lockdown enforced in most countries to control the spread of the pandemic and worries because of professional responsibilities related to teaching and research [2].

Lack of awareness regarding the infection can be the main reason which often leads to an unconcerned attitude, which may adversely affect the preparedness to meet these challenges. The fear and anxiety related to epidemics and pandemics also influence the behaviour of people in the community [3]. As COVID-19 is a new disease and are having the most devastating effects globally, its emergence and spread, causes confusion, anxiety and fear among the general public. Fear is the breeding ground for hatred and stigma. Since the onset of the coronavirus pandemic there has been an increased use of masks and sanitizers resulting in exhaustion of resources in the market. A shortage of personal protective equipment endangers health workers. Especially in a country like India which is a densely populated country without a robust healthcare infrastructure, it is a cause of worry.

WHO gave messages for team leaders or managers in health facilities for keeping all staff protected from chronic stress and poor mental

health during this response means that they will have a better capacity to fulfil their roles and to keep in mind that the current situation will not go away overnight and we should focus on longer term occupational capacity rather than repeated short term crisis responses [4].

Problem based learning is a method that requires finding a sound or practical solution to a certain problem through the process of conducting research. Seen that PBL is an effective method for preparing multidisciplinary learner groups, giving an example on the learning created during problem solving of community health centers outbreak of SARS pandemic in Hawaii. This PBL experience found to help the overall increase in knowledge of bio event preparedness [5].

Buheji (2020) mentioned that the 'next normal' or the post COVID-19 era would not be similar to the pre COVID-19 years. The pandemic would touch the main issues of life, what we believe in, how we think, how we visualize our role in life, our next generation essentials, how we would react to a coming life crisis.

PBL helps in developing a problem containment plan where the

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cost of the problem could be avoided. To eliminate any problem in the new normal, it is necessary that we ensure that the problem does not worsen before being resolved. Developing a containment plan through PBL can help to free up resources which are highly needed at the time of the pandemic [5].

This study was conducted to assess the psychological impact of COVID 19 pandemic on youth population of Mysore city and to find whether there is any association between the psychological stress and change in behavior of the study population and indirectly assess the need for problem based learning.

Objectives

1. To assess the psychological impact of COVID 19 pandemic on youth population of Mysore city
2. To find whether there is any association between the psychological stress and change in behaviour of the study population.

Methodology

This is a cross sectional study done using a semi structured online questionnaire (Google form). The convenience sample of youth aged between 15-29 years (National Youth Policy) from various disciplines contacted through their emails and WhatsApp. Participants’ stress levels are being assessed using the The Impact of Event Scale with modifications for COVID-19 (IES-COVID-19) [6]. Items were scored on a

Figure 1: Level of stress

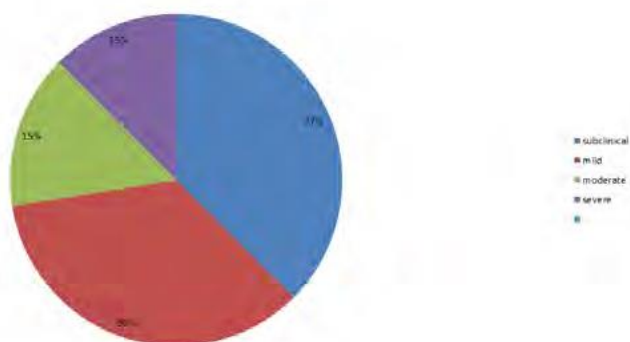


Figure 1: Level of stress

4 point Likert scale; 0=not at all, 1=rarely, 3=sometimes, and 5=often. Adding the scores of all items gave the total score which was categorized into subclinical, mild stress, moderate stress, and severe stress using cutoff points of 0–8, 9–25, 26–43, and 44+. Descriptive statistics used. Mean, and standard deviation and proportions used to estimate

the results [7].

Results and Discussion

Responses were received from 120 participants in which 72 (60%) were males and 28 (40%) were females (Figure 1).

Highest proportion of participants had subclinical and mild stress

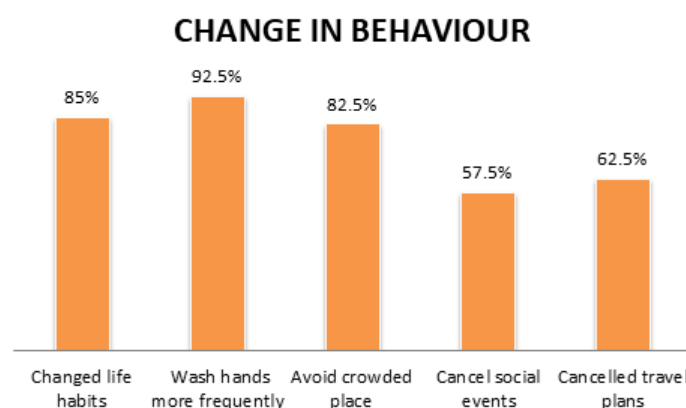


Figure 2: Change in behaviours due to COVID-19

according to modified impact of event scale. 13% had a severe stress regarding COVID 19 (Table 1).

The greatest fear was that important others would get COVID-19 infection because of the participant (mean=3.68 ± 1.07, p=0.028). Another greatest worry was restricted mobility in my country because of the COVID-19 outbreak (mean 3.38, p=0.012) There was a moderate significant positive correlation between fear of infection and level of stress among the participants (r=0.362, p=0.02)

Factors associated with stress levels

Table 2 highlights the factors associated with stress levels among young people in mysore city. Table 2 shows the factors related to COVID 19 associated with stress levels. Fear of infection and fear of restricted mobility had a significant association with stress (p=0.03) (Table 2).

Change in behaviour due to COVID 19

Participants agreed that they avoided crowded places (82.5%) and washed their hands frequently (92.5%). 85% of the participants agreed that there was some change in their life habits due to COVID 19. 57.5% cancelled the social events due to the stress related the infection (Figure 2).

| Categories | Extend of concern | | | | |
|---|--------------------------|------------------------|------------------------|--------------------------|-------------------------|
| | not at all concerned (%) | Slightly concerned (%) | Somewhat concerned (%) | Moderately concerned (%) | Extremely concerned (%) |
| 1.Catching COVID-19 infection from a colleague at work | 20 | 17.5 | 35.5 | 25 | 0 |
| 2.Important others/ loved ones getting infected with COVID-19 because of me | 15 | 12.5 | 7.5 | 20 | 45 |
| 3.Important others/ loved ones getting infected because of another source | 10 | 10 | 22.5 | 20 | 37.5 |

| | | | | | |
|--|----|------|------|------|------|
| 4.Finishing open courses satisfactorily | 15 | 10 | 32.5 | 27.5 | 15 |
| 5.Finishing required reports/ assignments before important deadlines | 20 | 12.5 | 27.5 | 20 | 20 |
| 6.Restricted mobility from one place/ city to another in my country | 10 | 22.5 | 20 | 15 | 32.5 |
| 7.Restricted mobility affecting my sports and social activities | 20 | 25 | 15 | 20 | 20 |
| 8. Missing scientific events important to my career (conferences, presentations, meetings) | 10 | 20 | 15 | 22.5 | 32.5 |

Table 1: major worries and attitudes related to the COVID-19 pandemic

| Factors | Mean rank stress level p value | | | | |
|-------------------------------|--------------------------------|-------|----------|--------|-------|
| | sub clinical | mild | moderate | severe | |
| Fear of infection | 15.67 | 21.5 | 19.5 | 33.4 | 0.03 |
| Professional or academic fear | 17.27 | 21.64 | 23.67 | 23.2 | 0.57 |
| Fear of restricted mobility | 13.8 | 25.93 | 22.5 | 23 | 0.036 |

Table 2: Factors associated with stress levels.

Conclusion

The findings indicated that the COVID-19 pandemic was a stress inducer for youth in Mysore city. Around 13% of participants had severe stress due to the pandemic. The greatest fear was that important others or loved ones would get COVID-19 infection because of the participant and restricted mobility in my country because of the COVID-19 outbreak. Measures taken by individuals to contain the infection included avoidance of crowded places and washing hands more frequently and majority of the participants cancelled social events and travel plans due to the fear of infection. None of the participants received any training regarding public health emergencies. Lack of problem based learning can lead to feeling of unstable and being unsecured during the challenges of the COVID-19. Since the new normal would be full of ambiguity and disruption, structured learning programs in will not address the stress and insecurity. Thus, problem based learning (PBL) programs would be the most suitable alternative.

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