Economic hardships during pandemics and its impact on mental health: a narrative review with special focus on the COVID-19 pandemic

Abstract
Economic crisis during pandemics has an obviously significant impact on the mental health of people. The uncertainty of economic conditions leaves people uncertain about their future, and, would trigger mental health conditions like stress, depression, anxiety, substance use, and also, re-emergence of pre-existing mental health issues. The coronavirus disease 2019 (COVID-19) pandemic has created job losses in various sectors and, the rise in unemployment will be an unavoidable consequence. Literature has pointed out to the causal relationship between unemployment and depression. Suicidal behaviour during the economic crisis is a significant psychological issue. Poor financial conditions could also affect children’s mental health due to disruption in the availability of nutrition and essential commodities, mental health issues in parents, and poor quality of parenting. The increase in alcohol consumption and the grey-market of alcohol noted in the time of COVID-19 pandemic are of utmost concern. Active labour market programmes are the need of the hour due to the rising unemployment rate. Family support programmes and debt relief programmes could help vulnerable families, and, prevent mental health issues in vulnerable groups, including the child and adolescent age groups. Strict control over the grey-market of alcohol, and, an increase in alcohol prices via government agencies would help prevent alcohol-related problems which are indirectly related to economic burden. Teleconsultation services would further help to manage those affected by the economic crisis and psychological issues.

Keywords: Economic Recession. Unemployment. Suicide.

INTRODUCTION
Economic crisis is an inevitable consequence of any pandemic in the history of the human race, but not all are recorded and analysed. Some of them which were researched had caused permanent scars in the minds of common citizens, economists, and politicians of the affected nations. A pandemic always induces fear and worry among people not only because of the uncertainty of the environment, but also due to the uncertainty of economic conditions.[1] Persons affected due to the economic crisis would experience fear and exhibit fear behaviour, related to the financial conditions. Such fear behaviour by persons would in turn have a potential impact on economic conditions of the affected persons or a community as a whole, this is termed as the "fearonomic effect".[2] Disrupted economic conditions may leave people uncertain about their future, and, would in turn trigger mental health conditions like anxiety, depression, and substance use, and, cause exacerbation of pre-existing mental health issues.[3]

Pandemics can be traced back to the 14th century starting with the bubonic plague, also called the Black Death, which affected more than 100 million people. The European continent was affected severely, and it had lost more than one-third of its population.[4] Later, the world faced the pandemics of cholera in the year 1817, and, the Russian flu during the year 1889. Pandemics during 20th and 21st century are called as "the modern pandemics", which began with Spanish flu in the year 1918, Asian flu during the years 1957-1958, Hong Kong flu in 1968, H1N1 Swine flu during the years 2009-2010, and, now the coronavirus disease 2019 (COVID-19) pandemic.[5]

Impact on economy and mental health during the earlier times (14th century to 19th century) were not recorded and analysed accurately then due to inadequate record keeping and lack of technological advances like now. This review chiefly focuses on the economic crisis during modern pandemics with a special accent on the current COVID-19 pandemic, and, its impact on mental health. Though the conditions of the world market one century ago and now are not similar, the impact on mental health may yet be the same.

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ECONOMIC CRISIS IN PREVIOUS PANDEMICS

Spanish flu pandemic
The Spanish flu started in the year of 1918 and ended by 1919, affecting more than 40 million people all over the globe. However, the proportion of mortality was higher among the age group of 18-40 years, and also, more among males than females;[6] hence, affected those with better physical health and productivity,[7] many of whom were also breadwinners for their families. This is one of the major reasons for the economic crisis during, and after the Spanish flu pandemic worldwide.

Though precise data about the economic crisis is not available due to lack of robust records and technology during those times, it was later evaluated by certain researchers from the data they obtained from newspapers, local magazines, and testimonies.[6] Impact on the economy due to the pandemic was mostly analysed by researchers who particularly focused on the economy of the United States of America (USA). Concerns were mainly over per capita income, change in the structure of daily wages, and saving rates of people.[8]

The literature on economic changes in developing countries like India focused especially on the agricultural domain. Professor Theodore W. Schultz concluded in his book, Transforming Traditional Agriculture that, the agricultural labour force in India was reduced by 8.3% after the influenza epidemic and, agricultural production fell by 3.3%. Saving rates of people reduced which was accompanied by hopelessness about the future. This was more evident among people who had witnessed death in their family.[9]

Asian flu and Hong Kong flu pandemics
The Asian flu, also called as, the Influenza A subtype H2N2 virus infection, originated from an avian influenza A virus. It was first reported in the country of Singapore in February 1957, and, later in Hong Kong during April month of the same year. It unfolded to become a pandemic and claimed more than 1.1 million populations worldwide. Later in 1968, another subtype of influenza A virus called H3N2 had caused the pandemic of Hong Kong flu and claimed lives of nearly a million people.[10]

The avian flu infection had affected the livestock sector drastically due to the fear of contraction through livestock products. The labourers working in livestock farms were affected severely when compared to the general population. Therefore, the economic crisis in the livestock sector continued even after the pandemic due to lack of labourers. The shutdown on the export business of poultry products, its disrupted demand and supply during the pandemic also hit the economy of the Asian countries.[11]

Swine flu pandemic
Swine flu, another influenza infection caused by the subtype H1N1 strain virus, had an outbreak in the 21st century, being first detected in the United States (US). This spread quickly in USA and, the rest of the world getting the status of a pandemic in the year 2009. The World Health Organization (WHO) declared an end to the pandemic in August 2010. It is estimated that the range of death due to swine flu pandemic was 151,700-575,400 during the first year of virus circulation, according to the Centre for Disease Control and Prevention (CDC).[12] This flu also affected people younger than 65 years like the Spanish flu pandemic in 1918, which amounts to 80% of cases.[12]

The sectors of tourism and the travel sector was predominantly affected during this pandemic. The years after 2000 were an important period for the sectors of travel and tourism due to higher utilisation of air travels, and the global economic development then. The pandemic during the period 2009-2010 was a shock to travel and tourism, just as a fall to a child when it had just started walking. A little nation like Brunei had lost about 30,000 sightseers (15%) amidst the pandemic and lost 15 million Brunei dollars during the primary 12 months’ post-swine flu period. There was a fall in the global Gross Domestic Product (GDP) due to the impact on the business which relied on import and export.[13]

ECONOMIC CRISIS DURING THE COVID-19 PANDEMIC
The COVID-19 pandemic is yet to unfold and its impact on the global economy may be more tremendous than expected. It is estimated that the lockdown due to this pandemic has cost more than one trillion US dollars, and, it is estimated that there may be a loss of more than two trillion US dollars in the coming days. The global economy is facing a serious problem in almost every sector but, certain sectors such as pharmaceutical companies may be the odd ones out. Though the lockdown has affected most domains in business, it has very severely affected the manufacturing, production, and export domains of every country.[14]

The global economy is also in a declining mode; the global GDP decreased by more than one percent. It is estimated that the global economic growth for the year 2020 would be 1.6%, and 3.2% in the year 2021.[15] The economic downfall will spread its wings not only in the year 2020, but also in 2021, probably in many countries. This would endanger the livelihood of daily labourers who depend on micro and macro industries, and those who work under unorganised sectors. The current burden of state and central government on dealing with this deadly virus impedes funding for other welfare schemes, which would also indirectly affect the vulnerable groups, homeless persons, those who are below the poverty line, pensioners, agriculture workers, disabled persons, and many other currently unidentified groups.

ECONOMIC CRISIS AND ITS IMPACT ON MENTAL HEALTH
The scope of this review is limited to mental health issues due to economic hardships during the pandemics with special attention to the COVID-19 pandemic. A rapid and focused search related to pandemics in general, and, the COVID-19 pandemic in particular was done through PubMed and Google Scholar; the key findings of which have been summarised in Table 1.
Unemployment and depression

Economic crisis is an acute stress to anyone who experiences it. The above-mentioned issues on the economic crisis can lead to problems such as an increase in unemployment and poverty among all classes of people and, loss in business for the capitals. The migrant workers in India are one of the worst-hit population due to the pandemic, and, one of the mental health concerns among them is worries about the job loss for many days.[16] Moreover, the overall unemployment rate in India went up to 24% in May 2020 due to measures such as the lockdown.[17] The casual relationship between unemployment and depression is a well-known fact, established through various research in the past. Recent literature review on emerging mental health issues during the COVID-19 pandemic concluded that unemployment is one of the key factors negatively impacting public mental health.[18] Unemployment per se is not a cause for depression, but, the psychological events due to the state. It can affect any person’s autonomy, and, in turn, decrease self-direction and control on a person’s future.[19] This is more pathetic among those who are sole breadwinners of their families and have debts.

The poor economic condition in the family could also affect children and adolescent’s mental health due to inability of parents to meet their needs, including essential commodities and proper nutrition, along with parent’s affected mental health and parenting quality.[20] Employed persons can also experience feelings of insecurity regarding the future due to the current economic situation. Worries about the future can induce anxiety to those who have an anxious personality and exacerbate disease in those who have already been suffering from the anxiety disorder. A nationwide cross-sectional study in Brazil between 2003 and 2017[17] found the same type of increase in 2017 after the economic recession of 2008-2009. Moreover, they found the same type of increase in 2017 after the economic recession of 2008-2009.

Economic crisis and suicides

Suicidal behaviour during an economic crisis is common at any point of economic recession, including pandemic. Both attempted suicides and complete suicides have increased at the time of economic crisis, and males are the one affected mostly because of their breadwinning responsibility. Though there is a strong relationship between suicidal behaviour and depression, suicidal behaviour during the economic crisis is also linked to impulsive behaviour without an apparent history of mental illness. The reason for the same is due to the sudden loss of life savings in the share market and bankruptcy. Some studies concluded that sudden financial loss rather than chronic poverty induces suicidal ideation.[19]

A recent review on a case by case understanding of recent suicides during the COVID-19 pandemic in the country of Bangladesh found that the economy-related issues are the cause for most of the suicides during the time of COVID-19 pandemic.[22]

Economic crisis and substance use problems

Another major issue during an economic crisis is substance use related problems. People suffering from depression or anxiety during an economic crisis adopt poor coping strategies to deal with their illness. The Finnish economic recession during the 1990s was associated with an increase in alcohol consumption, especially among unemployed people. Moreover, the economic crisis is also associated with spirit/hooch products consumption, mostly made by local alcohol makers.[23] The recent lockdown due to COVID-19 pandemic also paved the way for grey-market alcohol selling in countries like India. The content (percentage) of alcohol beverages in the grey-market is difficult to be monitored by government agencies, along with the difficulty in assuring quality products, which in turn, increases the number of cases of alcohol intoxication and harmful use.[24]

The reasons for alcohol consumption during the economic crisis have been explained by various theories, in the past. Some of the popular theories can clearly explain this problem. One of the theories is "stress-response-dampening theory", which explains that "people consume alcohol during the financial crisis to diminish the intensity of their reaction to anxiety and stress due to the crisis".[25] Another theory is "self-medication theory", it explains

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**Table 1: Summary of key findings of literature related to mental health issues during the economic crisis and pandemics found in PubMed and Google Scholar database**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Title of study</th>
<th>Type of study</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solantaus et al.[20]</td>
<td>Children's mental health in times of economic recession: replication and extension of the family economic stress model in Finland</td>
<td>An epidemiological prevalence survey</td>
<td>Children's mental health gets affected due to poor economic condition in parents during the time of economic recession</td>
</tr>
<tr>
<td>Haw et al.[19]</td>
<td>Economic recession and suicidal behaviour: possible mechanisms and ameliorating factors</td>
<td>A selective review of literature</td>
<td>Financial loss rather than chronic poverty induces suicidal ideation</td>
</tr>
<tr>
<td>Werneck et al.[21]</td>
<td>Economic crises, behavioural changes, and hospitalization due to affective disorders in Brazil between 2003 and 2017</td>
<td>A nationwide cross-sectional survey</td>
<td>There was a rise in hospitalisation rates for affective disorders during the times of economic recession in Brazil</td>
</tr>
<tr>
<td>Sritharan and Sritharan[18]</td>
<td>Emerging mental health issues from the novel coronavirus (COVID-19) pandemic</td>
<td>A systemic review of literature</td>
<td>Unemployment is one of the key factors which negatively affects mental health</td>
</tr>
<tr>
<td>Bhuiyan et al.[22]</td>
<td>COVID-19-related suicides in Bangladesh due to lockdown and economic factors</td>
<td>Evidence from media reports</td>
<td>Cause for most of the suicides in the times of COVID-19 pandemic in Bangladesh is economy-related issues</td>
</tr>
</tbody>
</table>
that “increase in alcohol-related health problems could be the result of an increase in alcohol consumption among individuals to cope with the stress due to the economic crisis; this further leads to the development of dependence pattern among certain people”. Yet another theory described by French et al. is more relevant during this pandemic, which is due to the social restrictions and lockdown measures. The theory is called as “non-working time theory”; concurring to this theory, “a decrease in working hours (either due to job loss or fewer tasks at work) will lead to more time for social events, recreational activities, and watching television and any form of media. It is understood that these activities may often be accompanied by alcohol consumption especially in the already vulnerable ones”.

Though the social activities are not much possible during the time of the pandemic, the fewer errands at work may make them more engaged them more in social events, media, television, and also, alcohol consumption. It would be much worse if two or more family members have an alcohol use problem, and, if the drinking behaviour is accepted and enabled by the family members.

FAVOURABLE MEASURES

The measures to mitigate the impact of the economic crisis on mental health during pandemics is disrupted, since, the functional systems of the world are suffering, including the functioning of the frontline healthcare workers. Mental health is challengeable even to the mental health professionals because of the stressful situations. However, it is not impossible, as many countries tackled similar problems in the past with adequate planning and execution.

The developed countries with good social welfare schemes and employment schemes for the unemployed have reduced the impact of the economic crisis on mental health on commendable proportions in the past pandemics. Government agencies should not ignore the impact of the economic crisis on mental health during the pandemic and appropriate funding should be directed towards policy making and for the implementation of framed programmes. The issue of unemployment would be one major contributor to many mental disorders in the long run; therefore, this should be handled effectively by creating appropriate labour market. The poor economic conditions in families, especially, those who are in the below poverty line group can be helped by the provision of debt relief programmes by the government agencies. Active measures have to be taken to deal with substance use problem during and after the pandemic by giving much attention to grey-market business, and, by creating an effective community model to prevent the mental health effects associated with these issues. The probable interventions to handle mental health issues during the economic crisis due to the pandemics have been summarised in Table 2.

The above-said recommendations were researched in the past and WHO has concluded the findings in the book of impact of economic crisis on mental health. Agreeing to that, “the mental well-being during an economic crisis depends on activity in five key realms; active labour market programmes, family support programmes, control of alcohol prices and availability, primary care for the people at high risk of mental health problems, and, debt relief programmes”.

Apart from the above-mentioned recommendations, the recent studies have come up with a new style of management, relevant to recent times. One of the most applauded amongst these is teleconsultations. Though this model is adopted by various countries for mental healthcare during these times of pandemic, there is not much research evidence for the effectiveness of the same, especially for the current scenario and subject of discussion. A recent study of exploratory analyses among medical practitioners in India, viewing attitude to telemedicine in the times of COVID-19 pandemic through the online survey, concluded that the telemedicine service is more feasible for a psychiatrist and psychiatric care when comparing other medical professionals, due to the limitation of manual clinical examinations in the telemedicine services, which is greatly needed for other medical professionals. The Greece mental healthcare had conducted a study on their teleconsultation services during this time of COVID-19 pandemic and found out that, the teleconsultation services for the persons with mental health issues is very effective.

Table 2: Specific mental health issues during economic crisis and pandemics, and probable interventions

<table>
<thead>
<tr>
<th>Specific mental health issues</th>
<th>Interventions</th>
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<tbody>
<tr>
<td>Depression due to unemployment</td>
<td>Active labour market programmes,[30]</td>
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<tr>
<td>Suicide</td>
<td>Teleconsultation services by mental health professionals at district and taluk level hospitals by forming mental health teams,[32]</td>
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<tr>
<td></td>
<td>Training to support the crisis management teams especially during the pandemic scenario.</td>
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<tr>
<td>Child and adolescent mental health</td>
<td>Family support programmes,[30]</td>
</tr>
<tr>
<td></td>
<td>Debt relief programmes to alleviate debts for those who are below the poverty line.</td>
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<tr>
<td>Alcohol use problems</td>
<td>By controlling the grey-market of alcohol and increasing the price of alcohol in government supplies,[30]</td>
</tr>
<tr>
<td></td>
<td>By improving healthcare infrastructure to deal with alcohol-related problems.</td>
</tr>
<tr>
<td>Those already suffering from mental</td>
<td>By initiating appropriate programmes to ensure functioning of mental healthcare facilities and a continuous supply of medications.</td>
</tr>
<tr>
<td>health issues</td>
<td>Teleconsultation services,[31]</td>
</tr>
</tbody>
</table>
for the persons who used it, in one or more way. This helped the patients who had active suicidal ideations as a channel of ventilation, and also, gave a feeling of connectivity with society during the time of lockdown, which otherwise would not be really possible.[32]

CONCLUSION

To conclude, effective measures to impede the mental health problems due to the economic crisis during pandemics mostly depend on policies made by government agencies rather than individual aspirations. A combined effort through various modes, especially teleconsultation services, as mentioned earlier. Work done by non-governmental organisations (NGOs) has to be identified and appreciated. The interest of most vulnerable groups during the economic crisis has to be protected with the help of local functionaries and the schemes that would benefit them. Effective funding and manpower training would help government and responsible institutions to prevent mental health issues during this pandemic, and it can become a reference model for future pandemics.

As far as research is concerned, more directed research is needed to bridge the gap in understanding mental health issues during the economic crisis by including the contextual issues of vulnerable people like migrant workers, workers in unorganised sectors, daily wages, and small business owners rather than general research. Innovative methods to address mental health issues in them should be encouraged. The involvement of mental health professionals to care for them during difficult situations like COVID-19 pandemic should extend to the community level by coordinating with local government agencies, NGOs, with other medical professionals and public health teams.

REFERENCES


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