ANXIETY, RESILIENCE AND COPING STRATEGIES AMONG THE HEALTH CARE WORKERS DURING COVID-19 PANDEMIC

INTRODUCTION:
The covid-19 pandemic, also called as the black swan event, (Renjen, 2020) lead to an immense global unrest. The pandemic has proved to be expensive in terms of costing people’s life, finance, social ties, physical health and mental health. The pandemic created a ripple effect of affecting each and every individual’s life. (Nicola et al., 2020). The extent of the pandemic was such that it was declared as a global emergency by (WHO, 2020).

There were many cases reported in the city of Wuhan after the outbreak as the situation became extremely uncontrollable and the city of Wuhan reported a fatality rate of 3,869 in the month of April.

Soon after the outbreak in china, many countries began to report cases of individuals tested positive for novel corona virus. Italy was hit with 110 574 registered cases and 13 185 registered deaths related to severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) infection as of April 1, 2020. India reported its first confirmed case of corona on January 30 2020, in kerela, ( Perappadan 2020). The affected person had a travel history from Wuhan. On may 8th India reported 56,342 positive cases. The news papers and magazines were filled with statistical reports of patients diagnosed with covid-19 and the fatality rates. A nation wise lockdown was declared on march 24/3/2020 in order to control the outbreak of the virus. ( Ministry of Home Affairs).

As much as the physical aspects of contracting the virus, there were also reports of mental health issues among the patients diagnosed with covid-19 as they were quarantined in the hospital and there was increased anxiety, and fear of stigma after contracting the illness. (Talevi et al.,2020).

(Gupta and sahoo 2020) The front line health care workers were equally affected as much as the people who were diagnosed with covid-19. In spite of the conundrums of media reports focusing completely on novel corona virus and it fatality rate,sociological variables like job stress, fear of stigma and lack of adequate safety measures made the health care workers more vulnerable to mental health problems.

However there are also empirical evidence which suggests that health care workers have better coping mechanism in dealing with a triggering situation than the normal population. owing to their ability to discern the credibility of an information, experiential learning from previous medical emergencies.Thus medical health care worker can handle mental health issues associated with a pandemic effectively than non medical health care worker(Tan et al. 2020).

There are ample of studies, which articulates about the resilience among health care workers. A pandemic like covid-19, which demands hardiness as a cardinal trait to deal with a situation, most of the studies have reported that the health care workers have higher resilience, (Mosheva et al., 2020). However most of the studies have focused on health care workers and the mental health outcomes in general. The present study bridges the gap by understanding the mental health outcomes of health care workers who are working in the covid-19 pandemic.

Literature Review
The covid -19 pandemic has been found to be very much detrimental to human lives owing to the fatality rate and physical illness that came along with it. Though the nature of the pandemic seem to affect the physical health, it was during the pandemic that there were upsurge of mental health issues among the public and also the front line workers. The uncertainty and lack of clear information about the nature of the illness instigated anxiety among the public, there were wide spread of mental health issues such as depression, stress and anxiety. Many studies reported that the pandemic has
proved to be as much as a mental health concern. (Petzold et al., 2020), studied the risk, resilience, psychological distress and anxiety at the beginning of the covid-19 in Germany. The results of the study indicated that 50% of the samples expressed anxiety and psychological distress due to covid-19 pandemic. However psychological factors such as resilience, coping style such as taking social support, healthy lifestyle played as protective factors.

However there are substantiate amount of research evidence that confirm to the view that health care workers are most prone to develop anxiety, however the personal resources such as coping style, resilience play as protective factors by making them less vulnerable to develop anxiety (Tan et al., 2020), studied the psychological impact of the pandemic on health care workers working in Singapore, From the findings of DASS-21 and IES-R scores, the mean scores of the health care workers were lower than the previous pandemic such as SARS. A very interesting finding from the study, is that the health care workers who are in front line duty experience less anxiety and depression than the non medical para medical professionals, who do not have as much expertise in dealing with an outbreak, because of the lack of their experience in being on the front line duty. This is seen as an important factor for them to develop uncertainty and anxiety than the experienced medical professionals. The study substantiated the above mentioned hypotheses with a recent covid -19 study, which explored the difference in coping pattern between medical health care workers and non medical health care workers. It was seen that front line nurses had lesser vicarious trauma scores than the non front line nurses. Thus the study suggests appropriate interventions for non medical health care workers in managing their mental health issues such as depression, stress and anxiety due to the pandemic.

The covid-19 pandemic was found to be even more detrimental for the physicians and they had more stress and depression, and only few percentage of samples had good resilience, (Khalil et al., 2020) studied the Egyptian physicians mental health on the dimensions of stress, depression and coping styles. It was found that 63% of the samples suffered from severe or extremely severe depression. From the findings based on BRCs, it was found that only 17.1% of the samples had high resilience and that of the resilience scores negatively correlated with scores of DASS on anxiety, depression and stress.

Most of the literature summarizes the protective role of coping and resilience in managing the symptoms of anxiety, it is seen that there is an inverse relationship between resilience, coping style and anxiety.

Coping is one of the many factors that play a protective role in making the individual less vulnerable to develop anxiety. Coping is negatively associated with anxiety (Zhu et al., 2020) studied the prevalence of depression and anxiety symptoms among front line medical staffs working against covid-19. The findings of the study suggested that the prevalence rate of depression and anxiety among the front line staffs was 11.4% and 45.6%, history of depression or anxiety proved to be a risk factor in developing mental health issue due to the pandemic, of which an interesting pointer in the study was that, the coping style of physicians was negatively associated with anxiety, which indicates that coping style does play a critical role in the management of anxiety.

Need and Rationale of the study

Though there are many studies, that have been carried out to explore the impact of mental health issue due to the pandemic, the number of studies that focus on the protective factors against the mental health issue due to the pandemic are limited. In order to bridge the lacunae the present study attempts to understand the relationship between anxiety, coping style and resilience. To understand if there is a relationship between these variables, so as to understand the importance of protective factors and there by incorporate in future implications of framing appropriate intervention for the target population.

METHOD

Research Design:
The Ex post-facto research design was adopted for the study.

Aim:
The study aims to find the relationship between anxiety, coping style and resilience among health care workers.

Objective
To find out the relationship between anxiety and coping style among health care workers.
To find out the relationship between anxiety and resilience among health care workers.
To find out the relationship between resilience and coping style among health care workers.

Hypothesis
There is a significant relationship between anxiety and coping style among health care workers.
There is a significant relationship anxiety and resilience among health care workers.
There is a significant relationship between coping style and resilience among health care workers.

Sample Characteristics:
The socio-demographic details of the participants are presented in the Table 1. Participants were health care workers (doctors, nurse, psychologists, physiotherapist, radiographer’s, and social workers who work in hospital setting or health care setting during the pandemic). Participants were above 18 years of age and the samples were selected from different hospitals in Tamilnadu.

<table>
<thead>
<tr>
<th>S.no</th>
<th>Variables</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>2</td>
<td>Marital Status</td>
<td>Married</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Unmarried</td>
</tr>
<tr>
<td>3</td>
<td>Occupation</td>
<td>Doctor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nurse</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical-Psychologist</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clinical-Psychology Trainees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Workers</td>
</tr>
<tr>
<td>4</td>
<td>Physical Ailment</td>
<td>Present</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Absent</td>
</tr>
<tr>
<td>5</td>
<td>Tested Positive for Covid-19</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative</td>
</tr>
</tbody>
</table>

Sample Selection:
The sampling method used to select the sample was purposive sampling.

Inclusion Criteria
Samples who work in hospitals or health care setting during the covid-19 pandemic (doctors, nurse, psychologist, radiographer’s, and social workers)

Exclusion Criteria
Samples who are willing to participate in the study and the participants who have signed the informed consent.
The participants were informed of the possible risk of emotional disturbances during or post the participation in the study.

Consent Form:
The participants were given consent form, which includes details about the study and the participants willingness to participate in the study.

Harming:
No participant was harmed during the study

RESULTS AND DISCUSSION
This section contains the important tables and significant results that were obtained after the analysis of the data. The discussion section explains and justifies the results that have been obtained.

Table 2 Descriptive Statistics Of The Variables.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covid-19 anxiety</td>
<td>0.80</td>
<td>1.08</td>
</tr>
<tr>
<td>Coping style</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach style</td>
<td>29.03</td>
<td>9.14</td>
</tr>
<tr>
<td>Avoidance style</td>
<td>18.63</td>
<td>6.40</td>
</tr>
<tr>
<td>Resilience</td>
<td>3.55</td>
<td>0.70</td>
</tr>
</tbody>
</table>

Table 3 Pearson's Correlation Coefficient Between The Variables Of Coping Style And Covid Anxiety

<table>
<thead>
<tr>
<th>Avoidance coping style</th>
<th>Approach coping style</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>0.51 **</td>
</tr>
<tr>
<td>Approach style</td>
<td>0.09</td>
</tr>
</tbody>
</table>

**correlation is significant at 0.01 level

Table 3 shows the Pearson’s correlation coefficient values that were obtained between covid- anxiety and coping style. There are two types of coping styles which are mentioned in the table 3. A correlation coefficient of 0.51 which is significant at 0.01 level, has lead to the acceptance of alternate hypotheses. It indicates there is a positive relationship between anxiety and avoidance coping style, in other words if the avoidance coping style increases , there is also an increase in the anxiety. From the table 3, we can also see the correlation coefficient of anxiety and approach coping style, it is seen that there is no significant relationship between anxiety and approach coping style. The results of the current study is substantiated by (Zhu et al.,2020) the study focused on coping style and relationship between social support and covid anxiety among Chinese medical staff, it was seen that social support was negatively related to anxiety and positive and negative coping had effects on social support and anxiety.

Table 4 Pearson's Correlation Coefficient Between The Variables Of Covid-Anxiety And Resilience

<table>
<thead>
<tr>
<th>Resilience</th>
<th>Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.17</td>
</tr>
</tbody>
</table>

Table 4 shows the pearson's correlation coefficient values that were obtained between covid anxiety and resilience. A correlation coefficient of -0.17 indicates that there is no significant relationship between resilience and anxiety. The results of the study is substantiated with the findings of the study conducted by (Mosheva et al., 2020). Physicians reported high anxiety and it was found that there was an inverse relationship between resilience and covid-anxiety.
unknown. For further studies, a larger sample size which have potentially influenced the study tends to remain factors such as noisy environment, or distraction while filling thus the lack of direct contact with the samples which

Limitation And Implications:

In the table 5 we can also see the relationship between resilience and approach coping style, a correlation coefficient value of 0.09 indicates that there is no significant relationship between resilience and approach coping style. (Labetrague et al., 2020) studied the influence of resilience, personal factors and social support in covi anxiety and it was found, nurses were found to have prevalent covid-19 anxiety and social support, personal resilience and resilience were predictive of covid-19 anxiety which was analyzed through regression analysis.

Summary

Anxiety is one of the common outcome of pandemic and based on the findings of many empirical studies, health care workers are more vulnerable to develop mental health issue during the time of pandemic, due to the exposure towards the virus, fear of infecting the loved ones or lack of certainty around the course of the pandemic. Thus it is not uncommon for them to develop mental health issues. However few empirical evidence also suggests that front line medical health workers experience lesser mental health problems than the non medical health professional, as they are adequately equipped with information and their previous experiential learning in dealing with hazardous medical emergency cases. The studies focus on the protective role of personal factors such as resilience, personality disposition and coping style an+88d social factors such as social support and organizational support in making the individual less vulnerable to develop mental health issues. Thus the present study focused on the relationship between anxiety, coping style and resilience among health care workers. Data was collected using the covid-19 anxiety scale. Brief resilience scale, brief cope scale from a sample of 66 health care workers. Statistical analysis was conducted using Pearson’s coefficient of correlation and T- test. Results indicated that people have lower level of avoidance coping and lower level of anxiety and lower level of avoidance coping had normal level of resilience.

CONCLUSION:
The results of the study showed that there is a positive relationship between avoidance coping and anxiety. In other words, if avoidance coping decreases anxiety level is decreased. There is a negative relationship between avoidance coping and resilience, in other words if the avoidance coping decreases the levels of resilience is increased.

Limitation And Implications:
The limitation of the study is a small sample size due to which the results cannot be generalized. The study was conducted using google forms , due to the present pandemic situation, thus the lack of direct contact with the samples which compromises on the transparency of the other extraneous factors such as noisy environment, or distraction while filling the form , network connectivity problems etc... could have potentially influenced the study tends to remain unknown. For further studies, a larger sample size which focuses on intervention based experimental approaches to understand the effectiveness of an intervention in managing the mental health issues of health care workers can be of significance. The future studies can also understand the difference in mental health outcomes between front line health care medical workers and non medical health workers to understand the difference in dealing with a medical emergency situations and to design an appropriate intervention to address the concerns and thereby understand the effectiveness of the intervention is needed.

REFERENCES

15. Taleyev, D., Socc, C., Carai, M., Carnaghgi, G., Terebi, T., ... Pacitti, F. Mental health outcomes of the COVID-19 pandemic: rivista di psicatria, 55. doi:10.1708/3382.33569