



ASSESSMENT OF PERITRAUMATIC DISTRESS INDEX (CPDI) AMONG MEDICAL STUDENTS DURING THE COVID 19 PANDEMIC – A CROSS SECTIONAL STUDY.

Community Medicine

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ABSTRACT

The COVID-19 (Corona Virus Disease of 2019) Peritraumatic Distress Index (CPDI) was developed to assess the frequency of anxiety, depression, specific phobias, cognitive change, avoidance and compulsive behavior, physical symptoms and loss of social functioning. CPDI is considered as a rapid online compilation tool, easy to understand and is accepted by people. Items in the questionnaire inquire about the frequency of anxiety, depression, specific phobias, cognitive change, avoidance and compulsive behaviour, physical symptoms and loss of social functioning in the past week, with a range from 0 to 100. This study aims at using the CPDI questionnaire to evaluate the stress among students of a private medical college during the COVID 19 pandemic from Kanniyakumari by measuring the CPDI score of the medical students. A descriptive cross-sectional study was carried out among 120 medical students of a private medical college from Kanniyakumari for a period of 1 month. The study tool used is the standard COVID-19 Peritraumatic Distress Index (CPDI) questionnaire which consists of 24 items. 94.2% (n=113) of the study population had some form of distress and 5.8% (n=7) of them had no distress. Among those who had distress (n=113), 37.2% (n=42) had mild to moderate distress and 62.8% (n=71) had severe distress. 17.1% (n=7) of the men had mild to moderate distress. 78% (n=32) of the men had severe distress. 44.3% (n=35) of the female had mild to moderate distress. 49.4% (n=39) of the female had severe distress. Medical students are the future doctors of this society. This study has showed there is an alarmingly high level of distress among medical students due to the COVID 19 pandemic situation. Therefore further research should be carried out to identify the reason for increased distress among medical students and also methods to alleviate this distress must be adopted so that medical students can be relieved of their stress during this pandemic.

KEYWORDS

COVID-19, Distress, Medical, Students.

INTRODUCTION:

The Coronavirus Disease 2019 (COVID-19) has been defined as an extreme health, economic and social emergency and it was declared a global pandemic by the World Health Organization on March 2020^[1], resulting in lockdown and life restrictions in worldwide the attempt to prevent and slow the spread of the virus. Comparable previous emergencies, such as the SARS outbreak, were strongly demonstrated as spreading stress and inducing psychological disease in terms of depression, anxiety but also panic attacks, and even psychotic symptoms, delirium, and increased rates of suicidal^[2]. These results have been recently confirmed with respect to the current COVID-19 pandemic^[3], particularly in terms of high levels of psychological distress^[4], depression^[5], anxiety^[6], fear and panic behaviors^[7]. Therefore, the COVID-19 Peritraumatic Distress Index (CPDI) was developed to assess the frequency of anxiety, depression, specific phobias, cognitive change, avoidance and compulsive behavior, physical symptoms and loss of social functioning^[8]. CPDI is considered a rapid online compilation tool, easy to understand and is accepted by people. Items in the questionnaire inquire about the frequency of anxiety, depression, specific phobias, cognitive change, avoidance and compulsive behaviour, physical symptoms and loss of social functioning in the past week, with a range from 0 to 100. This study aims at using the CPDI questionnaire to evaluate the stress among students of a private medical college during the COVID 19 pandemic from Kanniyakumari by measuring the CPDI score of the medical students.

MATERIALS AND METHODS:

A descriptive cross-sectional study was carried out among 120 medical students of a private medical college from Kanniyakumari for a period of 1 month. The study tool used is the standard 24-item COVID-19

Peritraumatic Distress Index (CPDI) questionnaire which is scored from 0 to 100^[9]. The participants were selected by simple random sampling technique. After obtaining informed consent from the participants, the CPDI questionnaire was given to the students and the filled forms were collected. There were no incomplete forms. Data analysis was done using SPSS 22.0 software.

RESULTS:

Out of the 120 participants, 71 (65.8%) were female and 49 (34.2%) were male. 15 (12.5%) of them were from 1st year, 15 (12.5%) of them were from 2nd year, 48 (40%) of them were from 3rd year and 42 (35%) of them were from 4th year. The range of the CPDI score from our study was 0 (no distress) to 95 (severe distress). 94.2% (n=113) of the study population had some form of distress and 5.8% (n=7) of them had no distress. 61.6% (n=74) of the men had some form of distress and 32.5% (n=39) of the men had some form of distress. Among those who had distress (n=113), 37.2% (n=42) had mild to moderate distress and 62.8% (n=71) had severe distress. On bivariate analysis, 17.1% (n=7) of the men had mild to moderate distress (p<0.005). 78% (n=32) of the men had severe distress (p<0.005). 44.3% (n=35) of the female had mild to moderate distress (p<0.005). 49.4% (n=39) of the female had severe distress (p<0.005). Among the 1st year students, 26.7% (n=4) had mild to moderate distress and 73.3% (n=11) had severe distress. Among the 2nd year students, 100% (n=15) of them had severe distress, which is statistically significant (p<0.001). Among the 3rd year students, 12.5% (n=6) had no distress, 35.4% (n=17) had mild to moderate distress and 52.1% (n=25) of them had severe distress. Among the final year students, 2.4% (n=1) had no distress, 50% (n=21) had mild to moderate distress and 47.6% (n=20) had severe distress. The frequency analysis of each question of the questionnaire has been tabulated in Figure 1 and Figure 2.

Item Number	Items of the CPDI questionnaire	Not at all	Less	Neutral	More	Extremely
		N (%)	N (%)	N (%)	N (%)	N (%)
1.	Compared to usual, I feel more nervous and anxious.	25 (20.8)	51 (42.5)	22 (18.3)	15 (12.5)	7 (5.8)
2.	I feel insecure and bought a lot of masks, medications, sanitizer, gloves and/or other home supplies.	18 (15.0)	34 (28.3)	35 (29.2)	22 (18.3)	11 (9.2)

3.	I can't stop myself from imagining myself or my family being infected and feel terrified and anxious about it.	24 (20)	31 (25.8)	47 (39.2)	11 (9.2)	7 (5.8)
4.	I feel empty and helpless no matter what I do.	9 (7.5)	33 (27.5)	38 (31.7)	31 (25.8)	9 (7.5)
5.	I feel sympathetic to the COVID-19 patients and their families. I feel sad about them.	11 (9.2)	29 (24.2)	40 (33.3)	38 (31.7)	2 (1.7)
6.	I feel helpless and angry about people around me, governors, and media.	9 (7.5)	25 (20.8)	52 (43.3)	21 (17.5)	13 (10.8)
7.	I am losing faith in the people around me.	15 (12.5)	18 (15)	36 (30)	38 (31.7)	13 (10.8)
8.	I collect information about COVID-19 all day. Even if it's not necessary, I can't stop myself.	7 (5.8)	11 (9.2)	56 (46.7)	29 (24.2)	17 (14.2)
9.	I will believe the COVID-19 information from all sources without any evaluation	6 (5)	49 (40.8)	26 (21.7)	21 (17.5)	18 (15)
10.	I would rather believe in negative news about COVID-19 and be skeptical about the good news	23 (19.2)	13 (10.8)	36 (30)	26 (21.7)	22 (18.3)
11.	I am constantly sharing news about COVID-19	13 (10.8)	39 (32.5)	11 (9.2)	40 (33.3)	17 (14.2)
12.	I avoid watching COVID-19 news, since I am too scared to do so.	7 (5.8)	31 (25.8)	34 (28.3)	31 (25.8)	17 (14.2)
13.	I am more irritable and have frequent conflicts with my family.	6 (5)	15 (12.5)	57 (47.5)	30 (25)	12 (10)

Figure 1

14.	I feel tired and sometimes even exhausted.	24 (20)	10 (8.3)	34 (28.3)	42 (35)	10 (8.3)
15.	Due to feelings of anxiety, my reactions are becoming sluggish.	8 (6.7)	16 (13.3)	35 (29.2)	46 (38.3)	15 (12.5)
16.	I find it hard to concentrate	15 (12.5)	24 (20)	44 (36.7)	16 (13.3)	21 (17.5)
17.	I find it hard to make any decisions	4 (3.3)	25 (20.8)	34 (28.3)	47 (39.2)	10 (8.3)
18.	I feel uncomfortable when communicating with others.	11 (9.2)	2 (1.7)	68 (56.7)	19 (15.8)	20 (16.7)
19.	Recently, I rarely talk to my family.	6 (5)	20 (16.7)	30 (25)	37 (30.8)	27 (22.5)
20.	During this COVID-19 period, I often feel dizzy or have back pain and chest distress.	7 (5.8)	13 (10.8)	34 (28.3)	18 (15)	48 (40)
21.	During this COVID-19 PERIOD, I often feel stomach pain, bloating, and other stomach discomfort	3 (2.5)	31 (25.8)	20 (16.7)	33 (27.5)	33 (27.5)
22.	I cannot sleep well. I always dream about myself or my family being infected by COVID-19.	6 (5)	25 (20.8)	37 (30.8)	25 (20.8)	27 (22.5)
23.	I lost my appetite.	5 (4.2)	15 (12.5)	35 (29.2)	39 (32.5)	26 (21.7)
24.	I have constipation or frequent urination	6 (5)	17 (14.2)	32 (26.7)	28 (23.3)	37 (30.8)

Figure 2

DISCUSSION:

In 2021, Ramesh Nagarajappa et al did a study, "Validation and Assessment of COVID-19 Peritraumatic Distress Index among Indian Dental Professionals" among 234 participants, in which they found that CPDI is an effective tool for assessment of stress because of its acceptable validation scores. They concluded that nearly half (47.9%) the study population showed distress, dispersed as mild to moderate (39.3%) and severe (8.6%).^[9] However in our study we have found that 94.2% of the study population have some form of distress which is very alarming compared to the other study. In 2021, Maria Pilar Jimenez et al in their study, "COVID-19 Peritraumatic Distress as a Function of Age and Gender in a Spanish Sample" among 1094 spanish adults, concluded that Around 25% (n = 279) of the participants experienced mild to moderate distress symptoms, 16% (n = 179) severe distress, and about 58% (n = 636) showed no distress symptoms. Women experienced more distress than men (p<0.01) ^[10] In our study also we have found that women experienced more distress as compared to men due to this COVID-19 pandemic situation. In 2021, Anna Costantini et al in their study, "Italian validation of CoVID-19 Peritraumatic Distress Index and preliminary data in a sample of general population"

among 329 participants, they concluded that The psychometric properties of the Italian version are satisfactory and confirm that CPDI is a tool fast, non-intrusive, administered online, and therefore 'safe' in a phase with a high risk of contagion. ^[11] Our study has hence used the CPDI questionnaire to bring out the burden of distress inflicted by this COVID pandemic among medical students of a private medical college. In 2021, Roy Rillera Marzo et al in their study, "Factors Associated with Psychological Distress among Filipinos during Coronavirus Disease-19 Pandemic Crisis" concluded that most of the respondents did not feel distressed about COVID-19 (52.1%), whereas 39.5% and 8.4% had mild-to-moderate and severe distress. ^[12] However in our study only 5.8% of the study population had no distress, which is a negative indicator of how medical students are dealing with this pandemic situation.

CONCLUSION:

From our study we have found that 94.2% of the medical students have some form of distress as a result of this COVID 19 pandemic. Medical students are the future doctors of this society and they are the pillars of the future healthcare system of our nation. Therefore further research

should be carried out to identify the reason for increased distress among medical students and also methods to alleviate this distress must be adopted so that medical students can get relieved of their stress and focus on their studies and become great doctors.

SUGGESTION:

In order to arrive at a more accurate and elaborate result, this study should be carried out among medical students of different medical colleges from all over the country as this will help in assessing the level of distress among medical students in different parts of the country.

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