



COPING STRATEGIES DURING COVID-19 OUTBREAK: A SURVEY AMONG THE GENERAL PUBLIC

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ABSTRACT

Introduction: COVID-19 is a pandemic disease. Many of countries are being affected by this. It is like an unexpected situation for everyone. Everybody is not able to get adjusted with a sudden outbreak of COVID-19. Everyone has their own method of coping with the certain situation and according to that they have used different types of coping strategies to cope up with this crucial situation. The aim of the study was to assess the coping strategies used by the general public in COVID-19 outbreak. **Methods:** A cross-sectional, web based survey was conducted among the general public of India, including 110 participants with voluntary participation in May. A survey instrument was used for assessing the coping strategies among general public. **Results:** Descriptive statistics was used for analysis. Majority of the participants were students with 18-30 years of age and unmarried. Majority of the participants (65.5%) showed adequate coping strategies while 34.5% showed neutral coping strategies. **Conclusion:** During the time of this global pandemic and lockdown, there are high chances of the population to get mentally frustrated and get affect with psychological problems. Thus good coping strategies are required to face the situations.

KEYWORDS: Novel coronavirus, Coping Strategies, Outbreak, Pandemic, Anxiety and Psychosocial problems

INTRODUCTION

- The misinterpretation of the COVID-19 pandemic has the potential for creating devastating stress that might turn into anxiety and other psychological diseases. The social isolation, quarantine, and lockdown can increase stress responses and generate more status of uncertainty.
- The Novel Coronavirus 2019 (COVID-19), which is known as a severe acute respiratory syndrome Coronavirus 2 has gained intense attention worldwide.
- The COVID-19 that has been first identified in Wuhan, Hubei Province, China in December 2019 which soon World Health Organization (WHO) declared it is a global pandemic with an international public emergency that poses a threat on public health both physically and psychologically.^[1]
- COVID-19 has become a stressor as it has affected people's lives in different aspects, and since there is no vaccine yet.
- Previous studies on the physical and psychological effects of earlier outbreaks of serious infectious diseases, such as SARS, showed increased stress, anxiety, depression and post-traumatic stress among survivors.^[2]
- The widespread social isolation, quarantine and in certain countries the strict and long curfew measures, in an attempt to contain the global pandemic, could also lead to a high level of psychological distress.^[3]

AIM

This cross-sectional survey was conducted to assess the coping strategies used by general public during COVID-19 outbreak.

METHODS

A web based cross-sectional study was conducted using a survey instrument to assess the responses of general public in regarding the coping strategies used during this global pandemic.

A total of 110 Participants voluntarily participated in the survey from different parts of India.

Tools and techniques: Web based Survey instrument designed on Google document consisted of 25 statements on rating scale to assess the coping strategies of the general public during outbreak of COVID-19.

The developed survey instrument was assessed for validity and reliability (Cronbach alpha- 0.84).

The maximum score of coping strategies used was 75 and minimum score was 0. A score of 0-25 was considered as inadequate coping strategies, 26-50 was considered as neutral coping strategies and a score of 51-75 was considered as adequate coping strategies.

DATA COLLECTION PROCESS

The data was collected using Google document, link was created and circulated with the help of whatsapp. The participation was voluntary and confidentiality was maintained and participants were informed that they can withdraw from the study at any stage. Informed consent was obtained from each participant prior to the participation.

RESULTS

Data was organised in excel sheet. Descriptive and inferential statistics were used for the data analysis with the help of SPSS 16.0 for frequency percentage distribution and association between the variables.

Table1. Frequency and percentage of socio demographical characteristics of participants.

N=110

SI. No.	Variable	Categories	f(%)
1.	Gender	a. Male b. Female	46(41.8) 64(58.2)
2.	Age	a. 18-30 b. 31-45 c. 45-60 d. ≥61	89(80.9) 17(15.5) 3(2.7) 1(0.9)
3.	Education	a. Senior secondary b. Graduation c. PG or higher	6(5.5) 50(45.5) 54(49.1)
4.	Profession	a. Student b. Education sector c. Health sector d. Other profession	46(41.8) 12(10.9) 29(26.4) 23(20.9)
5.	Marital Status	a. Married b. Unmarried	32(29.1) 78(70.9)
6.	Type of family	a. Nuclear family b. Joint family	62(56.4) 48(43.6)
7.	History of anxiety or stress	a. Yes b. No	11(10) 99(90)

Related to socio demographical variables

Table 1 shows the frequency and percentage of the socio demographical variables of the study participants. A total of 110 participants participated in the survey of which(41.80%) participants were males while (58.20%) participants were females. majority of the study participants were between 18-30 years of age (80.9%). Almost half(49,10%) of the participants were having educational qualification of post graduation or higher and 45.50% were graduates. Majority of the participants were students(41.80%), 10.90% were from education sector, 26.4% were from health sector while 20.90% were from other professions. Majority of the participants were Unmarried(70.9%). More than half (56.4%) of the participants were living in Nuclear family. 10% participants were having past history of anxiety or stress.

Table2. Frequency and percentage of the responses of the participants related to coping strategies used.**N=110**

Statement	Never	Rarely	Sometimes	Always
	f(%)	f(%)	f(%)	f(%)
1. मैं समस्या से ध्यान हटाने के लिए अन्य कार्यों या गतिविधियों में शामिल हो जाता हूँ	11(10)	15(13.6)	46(41.8)	38(34.5)
2. मैं अपने आप से कहता हूँ कि यह वास्तविक नहीं है	43(39.1)	23(20.9)	30(27.3)	14(12.7)
3. मैं शराब / धूम्रपान सिगरेट / गांजा / चरस / हेरोइन / कोकीन आदि मादक पदार्थों का सहारा लेता हूँ, अपने आप को बेहतर महसूस करने के लिए	98(89.1)	4(3.6)	8(7.3)	0
4. मैं दूसरों से भावनात्मक समर्थन प्राप्त करता हूँ	25(22.7)	28(25.5)	32(29.1)	25(22.7)
5. मैं समस्या के समाधान के लिए कोई प्रयास नहीं करता हूँ	62(56.4)	8(7.3)	18(16.4)	22(20)
6. मैं परिस्थिति को बेहतर बनाने के लिए आवश्यक कार्यवाही करने के लिए खुद को प्रेरित करता हूँ	1(0.9)	6(5.5)	20(18.2)	83(75.5)
7. मैं ऐसा विश्वास नहीं करता कि समस्या है	27(24.5)	24(21.8)	45(40.9)	14(12.7)
8. मैं समस्या समाधान के लिए दूसरों से सहायता/सलाह लेता हूँ	3(2.7)	14(12.7)	59(53.6)	34(30.9)
9. मैं समस्या को एक धनात्मक परिप्रेक्ष्य में देखता हूँ	6(5.5)	10(9.1)	32(29.1)	62(56.4)
10. मैं अपने समस्या के समाधान की आलोचना करता हूँ	43(39.1)	21(19.1)	29(26.4)	17(15.5)
11. समस्या के समाधान के सन्दर्भ में कुछ योजना बनाकर उस पर कार्यवाही करता हूँ	5(4.5)	11(10)	43(39.1)	51(46.4)
12. मैं समस्या समाधान के लिए स्वयं को असहाय पाता हूँ	49(44.5)	25(22.7)	29(26.4)	7(6.4)
13. समस्या के बारे में कम सोचता हूँ, और दूसरे कार्यों में लग जाता हूँ, जैसे टीवी देखना, पढ़ना आदि	22(20)	21(19.1)	39(35.5)	28(25.5)
14. मैं समस्या को स्वीकार कर लेता हूँ	12(10.9)	15(13.6)	41(37.5)	42(38.2)
15. मैं अपने ऋणात्मक भावनाओं को प्रकट करता हूँ	38(34.5)	38(34.5)	29(26.4)	5(4.4)
16. मैंने समस्या के साथ जीना सीख लिया है	25(22.7)	24(21.8)	30(27.3)	31(28.2)
17. मैं समस्या के लिए अपने आप को दोषी मानता हूँ	43(39.1)	30(27.3)	24(21.8)	13(11.8)
18. मैं परिस्थिति का मज़ाक उड़ाता हूँ	88(80)	14(12.7)	4(3.6)	4(3.6)
19. स्वयं से सकारात्मक बातें करता हूँ	9(8.2)	15(13.6)	25(22.7)	61(55.5)
20. अपना ध्यान अप्रिय विचारों से हटा लेता हूँ	10(9.1)	12(10.9)	42(38.2)	46(41.8)
21. मैं खुद को शारीरिक गतिविधियों जैसे व्यायाम, तेराकी आदि में व्यस्त रखता हूँ	10(9.1)	22(20)	35(31.8)	43(39.1)
22. मैं खुद को शोक जैसे संगीत सुनना आदि में व्यस्त रखता हूँ	5(4.5)	14(12.7)	42(38.2)	49(44.5)
23. मैं चिंता और तनाव से अवगत हूँ और मैं इससे निपटने में सक्षम हूँ	2(1.8)	15(13.6)	35(31.8)	58(52.7)
24. मैं जीवनसाथी / साथी / परिवार के सदस्यों के साथ गुणवत्तापूर्ण समय बिताता हूँ	3(2.7)	11(10)	26(23.6)	70(63.6)
25. मैं आध्यात्मिक विश्वासों / गतिविधियों का पालन करता हूँ	4(3.6)	15(13.6)	31(28.2)	60(54.5)

Table 2 depicts that 41.8% participants said that they sometimes join other tasks or activities to divert attention from the problem, 39.1% participants informed that they never say to themselves it's not real, majority of participants (89.1%) never used alcohol or other substance to make themselves feel better.56.4% participants informed that they always try to solve the problem. Two third of the participants(75.5%) said that they motivate themselves to take necessary actions to improve the situation. 40.9% participants sometimes do not believe that there is problem. Half of the participants (53.6%) seek help / advice from others for problem solving. Majority of the participants (56.4%) see the problem in a positive perspective. 39.1 % participants never criticize their solution of the problem. 46.4 % participants plan and act on the problem in relation to the solution. 44.5 % participants never find themselves helpless to solve problems. 35.5 % participants sometimes tend to think less about the problem, and get into other tasks, like watching TV, reading, etc.38.2 % participants always accept the problem. 34.5% participants never and 34.5% rarely express their negative feelings. 28.2 % participants said that they have learned to live with problems always. 39.2% participants never blame themselves for the problem. A majority of the participants (80%) never make joke of the situation. More than half (55.5%) participants always talk positively to themselves. 41.8 % participants always take their mind off of unpleasant thoughts. 39.1 % always keep themselves busy in physical activities like exercise,

swimming etc. 44.5% always keep themselves busy with hobbies like listening to music etc. 53.7% participants always aware of anxiety and stress and they are able to deal with it. Many of the participants (63.6%) always spend quality time with spouse / partner / family members. More than half (54.5) of the participants always follow spiritual beliefs / activities.

Table3. Coping strategies among different age groups.

N=110

Age	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p
18-30 years (n=89)	32(36)	57(64)	Fisher exact test	.806	3	.848
31-45 years (n=17)	5(29.5)	12(70.6)				
45-60 years (n=3)	1(33.3)	2(66.7)				
≥61 years (n=1)	0	1(100)				

Table 3. depicts that 64% participants with age 18-30years and 70.6% with age 31-45% were using adequate coping strategies. There was no significant difference among the coping strategies used by different age groups as assessed by fisher exact test (p=.848).

Table4. Coping strategies between gender.

N=110

Gender	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p
Male (n=46)	21(45.7)	25(54.3)	Chi square test	.4.313	1	.038
Female (n=64)	17(26.6)	47(73.4)				

Table 4. shows that 54.3% male participants and 73.4% female participants were using adequate coping strategies during stressful situations. There was a statistically significant difference found between the coping strategies used by both genders as assessed by chi square test (p=.038). 29.1% participants said that they get emotional support from others.

Table5. Coping strategies among individuals with different educational status.

N=110

Education	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p
Senior Secondary (n=6)	2(33.3)	4(66.7)	Chi square test	.492	2	.782
Graduation (n=50)	19(38)	31(62)				
PG or higher (n=54)	17(31.5)	37(68.5)				

Table 5. depicts that 66.7% participants with senior secondary education , 62% with graduation and 68.5% with post graduation or higher educational status were using adequate coping strategies. There was no significant difference among the coping strategies used by participants with different educational status as assessed by fisher exact test (p=.782).

Table6. Coping strategies among different professions.

N=110							
Profession	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p	
Student (n=46)	17(37)	29(63)	Chi square test	.974	3	.808	
Education Sector (n=12)	3(25)	9(75)					
Health Sector (n=29)	9(31)	20(69)					
Other Profession (n=23)	9(39.1)	14(60.9)					

Table 6. depicts that 63% students , 75% participants working in education sector and 69% participants working in health sector and 60.9% other professionals were using adequate coping strategies. There was no significant difference among the coping strategies used by different professionals as assessed by chi square test (p=.808).

Table7. Coping strategies between married and unmarried individuals.

N=110							
Marital status	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p	
Married (n=32)	8(25)	24(75)	Chi square test	1.818	1	.177	
Unmarried (n=78)	30(38.5)	48(61.5)					

Table 7. depicts that 75% married and 61.5% unmarried individuals were using adequate coping strategies. There was no significant difference between the coping strategies used by married and unmarried individuals as assessed by chi square test (p=.177).

Table8. Coping strategies between individuals living in joint and nuclear family.

N=110							
Family Type	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p	
Joint Family (n=48)	17(35.4)	31(64.6)	Chi square test	.029	1	.866	
Nuclear Family (n=62)	21(33.9)	41(66.1)					

Table 8. shows that 64.6% individuals living in joint family and 66.1% individuals living with nuclear family were using adequate coping strategies. There was no significant difference between the coping strategies used by individuals living in joint and nuclear families as assessed by chi square test (p=.866).

Table9. Coping strategies between individuals with and without history of stress or anxiety.

N=110							
History of Stress or Anxiety	Neutral coping strategies f(%)	Adequate coping strategies f(%)	Test	Value	df	p	
Yes (n=11)	7(63.6)	4(36.5)	Chi square test	4.574	1	.032	
No (n=99)	31(31.3)	68(68.7)					

Table 9. depicts that 36.5% individuals with history of anxiety or stress and 68.7% individuals without history of anxiety or stress were using adequate coping strategies. There was a statistically significant difference between the coping strategies used by individuals with and without history of stress or anxiety as assessed by chi square test ($p=.032$).

DISCUSSION

Covid-19 has affected the individuals around the world. It has affected the lifestyle of the individuals. There are many deaths and affected cases of the Covid-19 all around the world. Day by day thousands of new cases are found. This global pandemic has affected the individuals mentally as well, which can lead to many psychological problems like stress or anxiety, etc. Thus to assess the coping strategies of the general public, we conducted this survey.

Majority of the participants were between the age group of 18-30 years and students. Most of the participants were unmarried. A large number of participants were not having any past history of stress or anxiety.

Majority of the participants showed adequate coping strategies while rest of the participants were having neutral coping strategies, none of the participants shown inadequate coping strategies.

CONCLUSION

A majority of the participants (65.5%) were showed adequate coping strategies. A statistically significant difference found among the coping strategies used by both the genders and participants with and without the past history of stress or anxiety.

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