



A Study to Assess the Fear and Anxiety among Parent of School Going Children during COVID Pandemic in Tirupati.

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ABSTRACT

Background: Parenting has always been a challenging task. Many schools and workplaces were closed in the COVID pandemic due to that many of the parents had found themselves dealing with a new and often very stressful family situation.

Objectives:

- To assess the level of fear and anxiety among parents of school going children during COVID pandemic.
- To find the association between the level of fear and anxiety with selected demographic variables.
- To find the correlation between level of fear and anxiety among parent of school going children during COVID Pandemic.

Materials and Methods: A cross-sectional study was conducted among 120 parents using convenience sampling technique. The interview was conducted with the COVID precautionary measures and collected data about several aspects of participant's sociodemographic, fear and anxiety using Fear of COVID-19 scale and GAD-7 scale.

Results: Majority of parents of school going children 73(60.8%) had experienced feeling of terror and 2(1.7%) had mild fear, 69(57.5%) had moderate anxiety and 13(10.8%) had mild anxiety. Chi square result showed significant association between level of anxiety with type of school, type of family, education of the parent, level

of anxiety with fear and vice versa ($P < 0.05$ level). Logistic regression analysis results showed that the parents' demographic variables had insignificant effects on parental fear and anxiety and other influencing factors.

Conclusions: This study demonstrates parents call for practicing relaxation techniques, raising awareness on COVID and family counselling to overcome fear and anxiety.

Keywords: *Fear and anxiety, Parent of school going children, COVID pandemic*

Introduction

The strain of coronavirus, COVID-19, was first reported in Wuhan, China in December 2019. The virus has since spread to all continents (except Antarctica).^[1] The World Health Organization (WHO) has declared the coronavirus disease 2019 (COVID-19), a pandemic.^[2] The severe contagious nature of COVID-19 has led to an unhealthy situation across the world. The worldwide population is 7.6 billion^[3], and the major part of the population, approximately 3.9 billion people, has been under lockdown and quarantined in their homes at some point.^[4] The lockdown and quarantine policies have been implemented by many nations to minimize the spread of this disease and bring it under control. The lockdown includes isolation at homes, travel restrictions, and termination of all public events. Modern lockdown strategies have been enforced all over the world in order to prevent the COVID-19 infection from spreading even further.^[5,6] Along with worry and even fear of becoming infected, citizens have to cope with the distressing experience of quarantine. To be confined at home implies the loss of freedom and separation from friends and family members as well as significant changes in daily routines, especially work or study activities.^[7]

Parenting has always been a challenging task. Many of the parents were having to work from home and run the household, and likely trying to keeping the kids on track with their virtual school work—all while enduring the restrictions of social distancing and even being cut off from the support of friends and loved ones. With the whole family often occupying the same space day after day, the strain can seem unrelenting. If the parents have been furloughed or lost the source of income, the financial pressure can add even more stress.^[8]

Previously, numerous investigations have demonstrated that people have solid pressure reactions in catastrophic events or crises. The pressure reaction brought about by such general wellbeing occasions is by and large showed as fear and anxiety, and contemplates have indicated that danger of fear and anxiety increments when individuals are in a condition of long-haul stress. Social help, as a steady asset got by people from others or the general public, is a significant factor influencing individual emotional wellness and can assist people with adapting to the emergency in life. As a controller, social help importantly affected the pressure reaction during extreme intense respiratory syndrome. An ongoing report has demonstrated that social help assumes a directing function between the public's intense fear and anxiety during COVID-19 pandemic.^[9]

The researcher identified that the individuals irrespective of age and gender have the fear, anxiety and depressive symptoms during the COVID pandemic in facing this danger which elevated with lack of knowledge on the preventive and control measures of COVID-19 due to inadequate information and spreading of numerous myths and rumours about COVID-19. The researcher, during conversations with the friends and family found/ observed that the parents of school going children were anxious about sending their children to school or even outside for playing during this COVID pandemic. As, parents have additional responsibility and concern towards their children which can lead to the higher levels of fear among them. Hereby, the researcher intrigued in conducting the study to assess the fear and anxiety of parent of school going children during the COVID pandemic. The objectives of the study were to assess the level of fear and anxiety among parents of school going children during COVID pandemic and to find the association and relationship of fear and anxiety among parents of school going children during COVID pandemic.

Methods

This was a cross-sectional study conducted in Nehru Nagar, Tirupati, Andhra Pradesh, South India involving the sample of 120 parents of school going children using the Daniel's formula. The study was initiated after obtaining permission from the Health Officer, Tirupati. Pilot study was done on 12 parents and the findings of the study revealed that the tool was highly reliable (reliability established by Split- half method using Spearman-Brown^[10] for standard questionnaire $r=0.9$ for fear, $r=0.8$ for anxiety, $r=0.9$ for social support) and feasible to conduct the study. The study was approved by the Ethical Committee of College of Nursing, Sri Venkateswara Institute of Medical Sciences, Tirupati, Andhra Pradesh. The parents who were available and interested in the time of main study data collection (01.05.2021 to 29.05.2021) were approached and the informed consent was taken. The participants were asked to fill up the questionnaires after clearly explaining them the purpose of the study and all the queries regarding the questionnaire were explained by the researcher, and the filled-up questionnaires were collected after ensuring its completeness and the data were kept confidential. Ethical considerations such as informed consent, anonymity, voluntariness, and option to withdraw at any point were followed.

- Sociodemographic details were gathered such as gender, age of parent, class and type of school in which the child studies, amnavodi scheme, religion, education and occupation of parent, number of children, type of family, family income, COVID test and results, opinion of reopening schools and agreeing in sending to school.
- *Fear of COVID-19 (FCV-19) scale*: FCV-19 scale is a validated scale, specifically developed by Ahorsu, D. K et al.,^[11] in 2020, to assess the level of fear during COVID pandemic. It consists of 7 items indicating the parent's level of agreement with the statements using a five-item Likert type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score was used to classify the study participants (ranged from 7 to 35) into calmness/ slight nervousness (7-12), mild fear/ fright (13-18), severe fear/ dread (19-24), terror (25-30), panic (31-35)

- *Generalized anxiety disorder-7 scale (GAD-7)*: GAD-7 scale is a validated scale, specifically developed by Spitzer RL et al.,^[12] in 2006 to assess the level of anxiety. It consists of 7 items indicating how often parents were bothered by the problems with scoring with 1-3. Answers included several days (1), more than half the days (2), nearly every day (3). The score was categorized as follows: mild (7-11), moderate (12-16), severe (17-21)
- *ENRICHD Social Support Instrument*: Is a validated scale, specifically developed by Mitchel et al.,^[13] in 2003 to assess the social support received from friends, family and society. It consists of 7 items. The first 6 used a 5-point Likert scale numbered 1 to 5. The 7th item is a Yes/ No question, scored 4 for Yes and 2 for No. Answers included none of the time (1), a little of the time (2), some of the time (3), most of the time (4), all the time (5). Total scores range from 8 to 34. The score was categorized as low social support (score at or below 27 out of 34), high social support (minimum score of 28 out of 34)
- The researcher intended to assess the level of knowledge on COVID-19, which was assessed through a structured questionnaire consisting of 34 items on knowledge related to symptoms, transmission and prevention of COVID-19. The score was categorized as poor knowledge (≤ 17), knowledgeable (18-25), highly knowledgeable (26-34). The researcher even assessed the concerns of the parents towards their child using a structured questionnaire consisting of 13 items. The score was classified ranging from unsure- 1, not concerned- 2, a bit concerned- 3, very concerned- 4 and categorized into unsure (0-12), not concerned (13-25), a bit concerned (26-38), very concerned (39-52)

All the data were entered in a spreadsheet and the missing data were excluded from the analysis. Data were analysed using EZR software which is based on R. Appropriate statistical tests including percentage distribution, Chi-square and logistic regression were used and the level of significance was $P < 0.05$ as standard.

Results

Sample Characteristics

A total of 120 parents were approached including, 63 mothers (52.5%) and 57 fathers (47.5%), 44 of parents' children were studying III, IV, V (36.7%) and 96 were of private schools (80%), 83 parents of school going children receives amnavodi scheme (69.2%), majority 68 parents were of Hindu religion (56.7%), 41 parents were with graduation (34.2%), major part 83 parents were with two children (69.2%), 43 parents were private employees (35.8%) 98 were of nuclear family (81.7%), majority 57 parents earn ₹30,001-₹50,000 per month (47.5%), Majority shows 80 parents had not tested for COVID (66.6%), and 40 parents had tested for COVID (33.3%), out of those 28 parents had negative results (23.3%) and 12 parents had tested positive (10%), 83 parents were opinionated in re-opening schools (69.2%) and 83 parents agreed in sending the child to school in re-opening schools (69.2%).

Condition of Parent's fear, anxiety, knowledge, concern and social support

A considerable proportion of 73 parents reported they had expressed the feeling of terror (60.8%) and 69 parents had moderate anxiety (57.5%) based on FCV-19 and GAD-7 scales respectively. [Figure 1 and 2]. Majority 75 parents had high knowledge on COVID-19 (62.5%), 112 parents were very concerned towards child during COVID pandemic (93.33%) and 115 parents had low social support (95.8%).

Chi-square Analysis

There was no significant association between level of fear and the demographic variables. There was statistically significant association between level of anxiety and type of school in which the child studies ($P=0.029$) and type of family ($P=0.027$). [Table 1] There was statistically significant association between level of knowledge and education of the parent ($P=0.017$), number of children ($P=0.033$), family income ($P=0.006$), COVID test results ($P=0.017$), opinion to re-open school ($P<0.001$), agreeing in sending child to school ($P<0.001$). [Table 2] There was no statistical association between the demographic variables and concern towards child during COVID pandemic. There was statistically significant association between COVID test results and social support ($P=0.005$). [Table 3] There was statistically significant association between concern towards child during COVID pandemic and level of fear ($P=0.0315$); between level of anxiety and level of fear ($P=0.001$). There was no statistical association between the other demographic variables and level of fear. [Table 4] There was statistically significant association between level of fear and level of anxiety ($P=0.000745$) at $P<0.05$ level. There was no statistical association between the other demographic variables and level of anxiety. [Table 5]

Logistic regression analysis

Regression analysis results showed that the parents' demographic variables had no significant relationship on parental fear, anxiety and parental knowledge on COVID-19, concerns towards their child during COVID pandemic, social support and with each other. [Table 6,7]

Discussion

This cross-sectional study results suggested that issues of fear and anxiety were prevalent among parents of school going children in Nehru Nagar, Tirupati. The study was conducted during the peak stage of the second wave of COVID pandemic therefore, the parent's fear and anxiety were relatively high during the time of data collection. The study was limited to participants who were tested negative at the time of data collection.

The present study findings were discussed with the findings of similar studies based on the objectives and hypotheses of the study.

The first objective was to assess the level of fear and anxiety among parent of school going children.

The second objective of the study was to find the association between the level of fear and anxiety with selected demographic variables. The study found no significant association with the parental fear and the demographic

variables, while had a significant association with the parental anxiety and type of school in which the child studies and type of family.

This study explored the influence of different external factors such as parental knowledge on COVID-19, concerns of parents during COVID pandemic and social support on the parental fear and anxiety. The results showed that the parents were highly knowledgeable on COVID-19. In the previous study they stated that participants without anxiety symptoms had more knowledge about preventive and control measures as compared to those with anxiety symptoms. ^[14] In another study they stated that majority (mean of 81.64%) of study participants were knowledgeable about COVID-19. ^[15] Therefore, this study also assessed the level of knowledge on COVID-19 among the parents. This study results showed that the parents were very concerned towards their child during COVID pandemic. There was significant association between the parents' concern towards their child and level of fear. In a previous study they have assessed the relations between the fears and concerns of the parents about COVID-19 and the results were significantly correlated. ^[16] This study results even showed that the parents had low social support. In the previous study they stated that the regression analysis results showed that social support had significant effects on parents' anxiety. ^[9]

The third objective of the study was to find the logistic regression between level of fear and level of anxiety and other variables and with demographic variables. In this study the researcher did not find any significant correlation between the level of fear/ anxiety and other variables. The further recommendations can be

- A study can be conducted focusing on the influence of parental fear and anxiety on the children during COVID pandemic.
- Focusing on the effect of online learning on the parents who had no formal education.

Conclusion

Majority of parents were screened with considerable level of fear and anxiety and these findings suggested that parents need to be enlightened regarding the strategies to overcome the fear and anxiety by practicing mindfulness and assertiveness through recognizing the fear symptoms which can be done by doing nothing but just making a mental journal entry. The key to that overcome anxiety is to control the breathing and meditation. Other relaxation techniques like progressive muscle relaxation, guided imagery, physical exercises, massages, music therapy, humour and laughter therapy. Activities like vaccination can also be helping in alleviating the fear and anxiety. Providing awareness on prevention and control measures of COVID-19 will also be helpful. Social support in times of the pandemic which can be fulfilled through family counselling, support lines through tele-counselling, virtual connecting and help groups. Due to the online learning, as children's completion of the courses and homework were not satisfactory, parents experienced stress and had many concerns and complaints. Measures such as increasing the interactivity of the courses and prohibiting teachers from assigning tasks to parents could improve the effectiveness of the children's study and the mental health of

parents and children. An information booklet regarding the strategies to overcome fear and anxiety was given and explained to the parents.

The findings of the present study could not be generalized because of small sample size, conducted in a single setting, and nonprobability convenience sampling technique was used.

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Conflicts of interest

There are no conflicts of interest

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Figure 1 And 2: Graphical representation of level of fear and anxiety

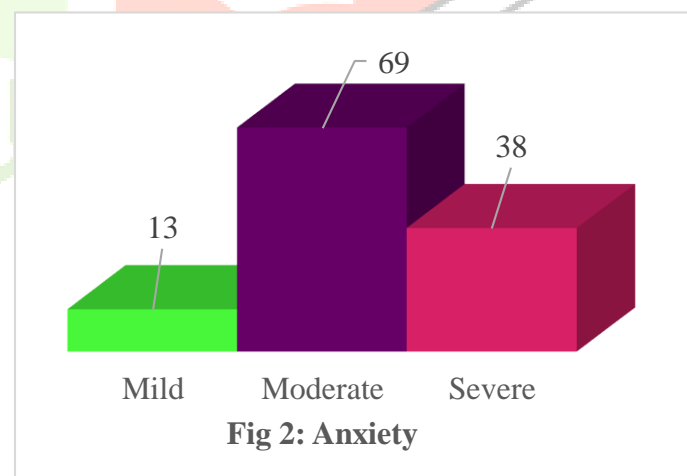
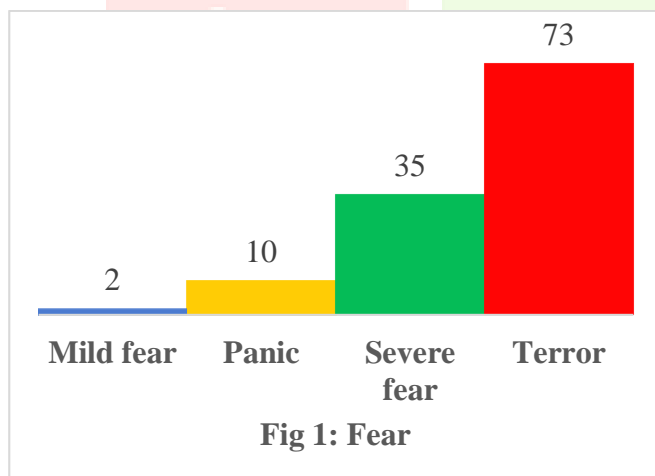


Table 1: Association between demographic variables and level of anxiety among parent of school going children

Variables	Anxiety			* P value
	Mild	Moderate	Severe	
Type of School				0.029*
Government	2(15.4%)	9(13%)	13(34.2%)	
Private	11(84.6%)	60(87%)	25(65.8%)	
Type of family				0.027*
Nuclear	8(61.5%)	55(79.7%)	35(92.1%)	
Joint	2(15.4%)	10(14.5%)	3(7.9%)	
Extended	2(15.4%)	1(1.4%)	0	
Single parent	1(7.7%)	3(4.3%)	0	

*: Association using Chi-Square at $P < 0.05$ level

Table 2: Association between demographic variables and level of knowledge on COVID-19 among parent of school going children

Variables	Knowledge			*P value
	Poor knowledge	Knowledgeable	Highly knowledgeable	
Education of parent				0.017*
No formal education	0	1(2.3%)	2(2.7%)	
Primary School certificate	1(50%)	3(7%)	0	
Middle school certificate	0	1(2.3%)	0	
High school certificate	0	11(25.6%)	11(14.7%)	
Intermediate or Diploma	1(50%)	12(27.9%)	25(33.3%)	
Graduate	0	13(30.2%)	28(37.3%)	
Post-Graduation and above	0	2(4.7%)	9(12%)	
Number of children				0.033*
One	1(50%)	6(14%)	12(16%)	
Two	1(50%)	25(58.1%)	57(76%)	
> Two	0	12(27.9%)	6(8%)	

Family income per month in rupees				
≤ ₹10,000	1(50%)	4(9.3%)	0	
₹10,001-₹30,000	1(50%)	20(46.5%)	24(32%)	
₹30,001-₹50,000	0	16(37.2%)	41(54.7%)	
₹50,001-₹1,00,000	0	2(4.7%)	8(10.7%)	
≥₹1,00,001	0	1(2.3%)	2(2.7%)	0.006*
COVID Test result				
No test	0	29(67.4%)	50(66.7%)	
Negative	2(100%)	13(30.2%)	14(18.7%)	
Positive	0	1(2.3%)	11(14.7%)	0.017*
Opinion to re-open schools				
No	0	22(51.2%)	61(81.3%)	
Yes	2(100%)	21(48.8%)	2(100%)	<0.001*
Agreed sending child to school				
No	0	30(69.8%)	50(66.7%)	
Yes	2(100%)	22(51.2%)	13(17.3%)	<0.001*

*: Association using Chi-Square at $P < 0.05$ level

Table 3: Association between demographic variables and social support among parent of school going children

Variables	Social Support		* <i>p</i> value
	High	Low	
COVID Test result			
No test	0	79(68.7%)	
Negative	4(80%)	25(21.7%)	
Positive	1(20%)	11(9.6%)	0.005*

*: Association using Chi-Square at $P < 0.05$ level

Table 4: Association between level of fear and concern towards child during COVID pandemic, social support, level of knowledge on COVID-19, level of anxiety among parent of school going children

Variables	Fear				*P value
	Mild fear	Panic	Severe fear	Terror	
Concern towards child					
A bit concerned	0	0	6	2	0.0315*
Very concerned	2	10	29	71	
Social Support					
High	2	0	2	1	2.05E-10
Low	0	10	33	72	
Level of Knowledge					
Poor knowledge	0	0	1	1	0.299
Knowledgeable	2	1	13	27	
Highly knowledgeable	0	9	21	45	
Anxiety					
Mild	1	0	8	4	0.001*
Moderate	0	3	23	43	
Severe	1	7	4	26	

*: Association using Chi-Square at $P < 0.05$ level

Table 5: Association between level of anxiety and fear, concern towards child during COVID pandemic, social support, level of knowledge on COVID-19 among parent of school going children

Variables	Anxiety			*P value
	Mild	Moderate	Severe	
Concern towards child				0.906
A bit concerned	1	4	3	
Very concerned	12	65	35	
Social Support				0.223
High	1	1	3	
Low	12	68	35	
Level of Knowledge				0.819
Poor knowledge	0	2	0	
Knowledgeable	5	24	14	
Highly knowledgeable	8	43	24	
Fear				0.000745*
Mild fear	1	0	1	
Panic	0	3	7	
Severe fear	8	23	4	
Terror	4	43	26	

*: Association using Chi-Square at $P < 0.05$ level

Table 6: Relationship between level of fear and concern towards child during COVID pandemic, social support, level of knowledge on COVID-19, level of anxiety among parent of school going children

Variables	Odds Ratio 95% CI	**P value
Concern towards child		
A bit concerned	-	-
Very concerned	0(0-Inf)	1
Social Support		
High	-	-
Low	98 (0-Inf)	1
Level of Knowledge		
Poor knowledge	0(0-Inf)	1
Knowledgeable	0(0-Inf)	1
Highly knowledgeable	-	-
Anxiety		
Mild	-	-
Moderate	10.40(0-Inf)	1
Severe	68 (0-Inf)	1

** : Association using logistic regression

- : Reference category

Table 7: Relationship between level of anxiety and fear, concern towards child during COVID pandemic, social support, level of knowledge on COVID-19 among parent of school going children

Variables	Odds Ratio 95% CI	**P value
Concern towards child		
A bit concerned	-	-
Very concerned	0.88(0.08-9.27)	0.92
Social Support		
High	-	-
Low	0(0-Inf)	1
Level of Knowledge		
Poor knowledge	19 (0-Inf)	1
Knowledgeable	1.12(0.29-4.26)	0.87
Highly knowledgeable	-	-
Fear		
Mild fear	-	-
Panic	30 (0-Inf)	0.99
Severe fear	74 (0-Inf)	1
Terror	42 (0-Inf)	1

** : Association using logistic regression

- : Reference category