

**IMPACT OF COVID-19 LOCKDOWN ON PSYCHOLOGICAL AND EMOTIONAL WELL-BEING
AMONG CHILDREN AGED 10 -17 YEARS****Dr. Thumjaa Annamalai¹, Dr. Vutukuru Pooja^{2*} and Dr. N. S. Raghupathy³**¹Professor, Department of Paediatrics, Aarupaadai Veedu Medical College, Puducherry, India.²Post Graduate, Department of Paediatrics, Aarupaadai Veedu Medical College, Puducherry, India.³HOD & Professor, Department of Paediatrics, Aarupaadai Veedu Medical College, Puducherry, India.***Corresponding Author: Dr. Vutukuru Pooja**

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ABSTRACT

Introduction: Due to the widespread outbreak of COVID-19, the lockdown was implemented and schools were shut down because of which the school going children psychological, emotional and physical status is getting affected. This study is done in children aged 10- 17 years to identify and recognize child's own emotions in this period and this study is not done anywhere up to our knowledge, it is done mainly to identify how social isolation, contact restriction and school shutdown, in the current pandemic can affect children emotional stress and psychological impact in children aged 10-17 years. **Methods:** A cross-sectional study was done in 250 school children aged 10 -17 years in a school in Pondicherry by convenience sampling for 2 months .children who are fulfilling the inclusion criteria was included in this study, after obtaining parental consent and assent from children. The questionnaire was sent through Google forms through parents mail Id/ whats app and the children belong to that particular age group filled the forms. Once 250 responses were obtained and the data was compiled. **Results:** Among 250 children aged 10- 17 years in a school, in Pondicherry there were 56.4% females and 43.6% males. Regarding Parent-children psychosocial and emotional wellbeing before and during lockdown was significant in children spending time with their parents (P < 0.0001), Parents helping kids in their study was significant (P <0.0001), Children feel that their parents became very friendly and understandable during lockdown which was also significant (P <0.001), and children helping their parents in household chores during lockdown was also significant (P <0.0001). Regarding the daily activities in children aged 10-17 years, their screen time during lockdown was increased which was significant (P 0.0005), their physical activity before and during lockdown was the same which was not significant (P 0.0603), Sleeping time for 6 – 8 hours, studying alone and playing with peer groups during lockdown was decreased in all and was significant (P < 0.0001). **Conclusions:** Children and adolescents are probably more likely to experience high rates of depression and most likely after enforced isolation ends. So these children should be offered preventive support and early intervention where possible psychological and supportive care should be given.

KEYWORDS: 10-17 years, Covid-19 lockdown, Psychological, Emotional well being.**INTRODUCTION**

The unexplained cases of pneumonia that originated as a cluster in Wuhan, China as a novel coronavirus disease, is officially designated as COVID-19 by the World Health Organization and has reached the level of a pandemic. Due to the widespread outbreak of this infectious disease, COVID- 19 lockdown is having a profound effect on all aspects of society, including mental health and physical health. The COVID-19 epidemic is no longer confined to China^[1] school closure and home confinement related issues also became relevant in other affected countries. The COVID- 19 national lockdowns in India was started on 25 March 2020 and is still being continued in many containment areas. This sudden implementation of isolation, contact restriction and school shutdown in

lockdown period, affected all the people, especially children. These measures have the potential to threaten the mental health of children and adolescents significantly.

Children and adolescents are experiencing a prolonged state of physical isolation from their peers, teachers, extended families, and community networks. Duration of quarantine, boredom, frustration, and stigma appear to increase the risk of negative psychological outcomes.^[2,3] Social distancing and school closures may therefore increase mental health problems in children and adolescents, who are already at higher risk of developing mental health problems. The children may no longer have that sense of structure and stimulation that is

provided by that environment, and now they have less opportunity to be with their friends and teachers, to get that social support that is essential for good mental well-being.^[3,4] Families are central to education and are widely agreed to provide major inputs into a child's learning.^[5] Evidence suggests that when children are out of school (eg, weekends and summer holidays), they are physically less active, have much longer screen time, irregular sleep patterns, and less favourable diets, resulting in weight gain and a loss of cardiorespiratory fitness.^[6,7] Global homeschooling will produce some inspirational moments; it seems very unlikely that it will on average replace the learning lost from school. But the point is there will likely be substantial disparities between families in the extent to which they can help their children learn.^[8]

This study is done to identify and recognize child's own emotions in this period and moreover, this study is not done anywhere up to our knowledge and it is done mainly to identify how social isolation, contact restriction and school shutdown, in the current pandemic can affect children emotional stress and psychological impact in children aged 10-17 years. During this lockdown, the only reliable and useful tool is an online questionnaire.

MATERIAL AND METHODS

A cross-sectional study was done in 250 school children aged 10 -17 years in a school in Pondicherry by convenience sampling for 2 months after obtaining ethical committee approval. The Inclusion criteria were children aged 10 -17 years willing for filling Google forms, Parents giving consent for the study and the Exclusion Criteria were Children who cannot access Google form, Children who have no access to the internet. Children who are fulfilling the inclusion criteria were included in this study, after obtaining parental consent and assent from children. A Questionnaire through google forms was constructed and validated and was sent through parents mail Id/ whats app of children belonging to 10 – 17 years. Once 250 responses were obtained it was recorded and the data was compiled. The

results were analyzed by chi-square and p-value (significant < 0.05). Data entry and statistical analysis were performed using SPSS version 26.0.

RESULTS

Among 250 children aged 10- 17 years in a school, in Pondicherry there were 56.4% females and 43.6% males. During COVID-19 lockdown 69.2% of children wanted to go to school instead of staying at home (30.8%). In-home 52% of children were feeling happy whereas 48% of children were feeling unhappy. 57.2% of parents came to know about their children talents during this lockdown period (figure1) and 69.2% of parents encouraged to improve their children talents whereas 30.8% of parents did not encourage them.

Regarding Parent-children psychosocial and emotional well-being before and during lockdown was significant in children spending time with their parents ($P < 0.0001$), Parents helping kids in their study was significant ($P < 0.0001$), Children feel that their parents became very friendly and understandable during lockdown which was also significant ($P < 0.001$), and children helping their parents in household chores during lockdown was also significant ($P < 0.0001$) (Table 1).

Regarding Online classes during the lockdown, Among 250 children (185) 74% had online classes, 26% of them did not have online class (figure 2). In which 68% of children did not like the online class. 92.4% of parents were concerned about their classes and 46.4% of parents ask the children to read all the time. 72.4% of children are stressed due to online classes and the remaining 27.6% of children are not stressed due to online classes.

Regarding the daily activities in children aged 10-17 years, their screen time during lockdown was increased which was significant ($P 0.0005$), their physical activity before and during lockdown was the same which was not significant ($P 0.0603$), Sleeping time for 6 – 8 hours, studying alone and playing with peer groups during lockdown was decreased in all and was significant ($P < 0.0001$) (Table 2).

Table 1: Parent children psycho-social and emotional well-being.

CATEGORY	BEFORE LOCKDOWN (%)	DURING LOCKDOWN (%)	P- VALUE
Spend time with their Parents	91 (36.4%)	159 (63.6%)	<0.0001
Parents helping kids to study	85 (34%)	165 (66%)	<0.0001
Friendly and understandable parents	52 (20.4%)	198 (79.6%)	<0.01
Helping parents in house hold chores	83 (33.2%)	167 (66.8%)	<0.0001

Table 2: Activities of children.

CATOGERY	BEFORE LOCKDOWN	DURING LOCKDOWN	P-VALUE
SCREEN TIME	105 (42%)	145 (58%)	0.0005
PHYSICAL ACTIVITY	136 (54.4%)	114 (45.6%)	0.0603
SLEEPING (6-8 Hrs)	186 (74.4%)	64 (25.6%)	< 0.0001
STUDYING	154 (61.6%)	96 (38.4%)	< 0.0001
PLAYING WITH PEER GROUPS	149 (59.6 %)	101 (40.4%)	< 0.0001

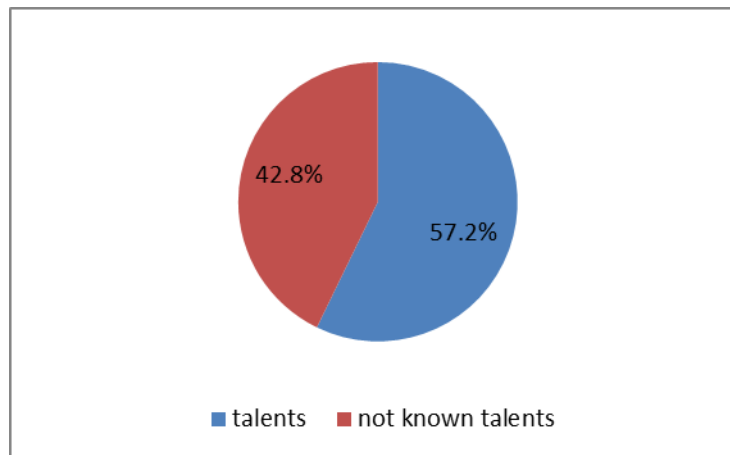


Figure 1: New talents of children identified by parents during the lockdown.

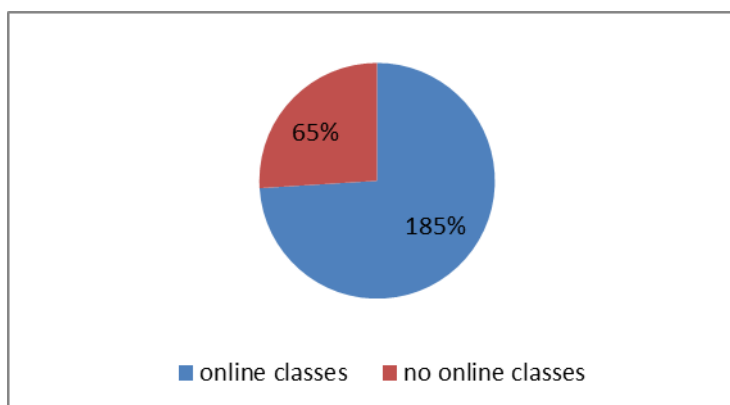


Figure 2: Children having online classes during the lockdown.

DISCUSSION

The data collected by the questionnaire suggested that COVID-19 lockdown had an important effect on a child's psychosocial and emotional well-being. At home 52% of children were feeling happy whereas 48% of children were feeling unhappy, Sabina yeasmin et al did a study with parents in Bangladesh about the mental health of children in that adults were feeling happy at home which was not significant. During the lockdown, 57.2% of parents came to know about their children talents during this lockdown period and 69.2% of parents encouraged to improve their children talents whereas 30.8% of parents did not encourage them whereas in Sabina yeasmin et al^[9] study parents did take any action to keep him/her busy during lock-down? Was significant, but the details to keep them busy was not explained in this study.

Regarding Parent-children psychosocial and emotional wellbeing before and during lockdown was significant in children spending time with their parents ($P < 0.0001$), whereas in sabina yeasmin et al^[9] study about child complain that you remain busy with your work during this lockdown too? It was significant, here the parents were busy spending time in their work whereas in our study the parents tried to spend time with children during the lockdown. Parents helping kids in their study was significant ($P < 0.0001$), Children feel that their parents became very friendly and understandable during

lockdown which was also significant ($P < 0.001$), and children helping their parents in household chores during lockdown was also significant ($P < 0.0001$). Knowing the children's reaction to the lockdown where most of the parents and children spend the whole day together is more difficult because of different family dynamics and they hinder the purposes of research. Evaluating the effect of the Pandemic is difficult. The outcomes are determined by several factors including the parents' psychological response to lockdown, which influences the children's mental and physical well-being of children.

Children also feel stressed because of the online classes and the majority of them did not find them useful. This data provides interesting insight into the present situation and, while studying will require more research, it is quite useful for the parents to understand what children are going through and can provide better care to their children.

Regarding the daily activities in children aged 10-17 years, their screen time during lockdown was increased which was significant ($P 0.0005$), in our study screen time is increased due to online classes, watching television, playing games but whereas in the study done by sabina yeasmin et al^[9] the screen time for playing games and watching cartoon was more and it was significant. In our study physical activity in children

before and during lockdown was the same and was not significant ($P = 0.0603$), Sleeping time for 6 – 8 hours, studying alone and playing with peer groups during lockdown was decreased in all and was significant ($P < 0.0001$). This is due to the current situation so particular care and attention are to be given to children during such situations to avoid stress and maintain their daily routine. In this study, we noticed that: how children are getting adjusted to the lockdown despite the restrictions implemented. How children are adapting to such situations is very commendable and Parents have to regularly monitor their daily activities to avoid any mental and psychological disturbances. It is advised to encourage children in a positive direction in a pleasant non-forcible way to maintain their mental peace.

Limitations in our study, there was no face to face interview which was avoided due to the current situation. If there was a larger sample size it would have been better to validate the results, our sample size was small because it was restricted to one school in Pondicherry due to the current situation. The questionnaire in our study was only for children aged 10 – 17 years, if there was a questionnaire for parents also the findings in the study would have been beneficial.

CONCLUSIONS

This study suggests that during lockdown the children have a positive impact regarding talent improvement, parent interaction and helping them in their studies which should be done as a normal routine by all parents, guardian etc to understand the children emotional well-being for their bright future. Whereas these children have a negative impact regarding sleeping patterns, physical activity, screen time and playing with friends, which should be brought to normal as done previously by encouraging and counselling the children as well as parents. Children and adolescents are probably more likely to experience high rates of depression and most likely anxiety after isolation ends. So these children should offer preventive support and early intervention where possible and be prepared for an increase in mental health problems.

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