Emotional and Behavioural issues in children during early Phases of school opening after Covid 19 Pandemic in Eastern India

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Abstract

Introduction: The Covid 19 pandemic was first officially noted in China in late 2019. After that, the virus spread globally. At that time it was a new virus and we did know nothing about the virus. So lock down or home confinement was the only option to control the spread of the virus ⁽¹⁾. During that time children suffered the most as they were confined at home ⁽²⁾. During this period they showed various behavioural problems and when restrictions were withdrawn they still showed some behavioural issues.

Methodology: We conducted a cross-sectional study using an English questionnaire. The questionnaire was validated by five independent psychiatrists who were finally excluded from the study. Responses from the parents of randomly selected 76 children were recorded. We included the children aged between 3 to 12 years and who previously used to go to school.

Results: 40.8% of children were of 6 to 10 years of age and the male and females were almost equal in number in our study (M: F = 40:36). Maximum children are from urban residences (about 59.2%) and the nuclear family (56.6%) followed by joint families (38.2%) and single-parent families (5.3%). In most of the cases (61.8%) father is the only earning member followed by both parents working (34.2%) and in only 3.9% of cases, the mother is the only earning member of the family. About 76.3% of parents observed behavioural issues in their children. The problems were mostly observed in 6 to 10 yrs of age. Males showed the problem most often than females (M:F = 33:25). Children from urban areas showed behavioural problems more often.

Discussion: Most of the parents reported that their children were having different sorts of problems during this period⁽³⁾. The families of small children aged 6 to 10 yrs of age were facing various problems more often. The children of this age group showed problems more often as they were isolated at home. Previously they were in the discipline of school and society. Due to the sudden release of pressure, all routine activities got disturbed.

Keywords: Covid 19, Temper tantrum, restlessness, inattention

Introduction

Severe acute respiratory distress syndrome, caused by a new strain of coronavirus(COVID 19) was first officially reported in Wuhan, China in late 2019 ⁽⁴⁾. Since then it has spread in alarming speed all over the world. WHO declared it a global pandemic in

March 2020 ⁽⁵⁾. India's first novel coronavirus disease was reported in January 2020 in Kerala ⁽⁶⁾. Within about 50 days India had reported 360 cases. As it was a new virus and also there was no known effective treatment it was the primary concern to break the chain of virus transmission by confining the people

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at home ⁽⁷⁾. On March 25 nationwide lockdown was imposed by India Government ⁽⁸⁾.

Since the day of lockdown, the children are confined at home. Before lockdown children could go for a face to face interaction with their peers, teachers, and relatives. They could go outside for playing or for some extracurricular activities. But from the very beginning of lockdown children were confined at home. All the learning and communications became restricted to digital platforms ⁽⁹⁾⁽¹⁰⁾. Children often show emotional and behavioural problems during this period of lockdown.⁽¹¹⁾

In this background, we studied a few children to record the degree of changes in this tough time of home confinement.

Materials and Method

We conducted a cross-sectional study using an English questionnaire. India was under unlock period during the study. The questionnaire was validated by five independent psychiatrists who were finally excluded from the study. Before the start of the study, we did a pilot study. The final questionnaire consists of 51 items. The questionnaire was divided into three groups, Socio-demographic data (age, sex, religion, residence, family type, occupation of parents), behavioural changes in children (inattention, sleep pattern, change of eating habits, depression, anxiety, engagement in mobile, television and internet game, nail-biting, thumb sucking) and parents perception of prolonged home confinement.

Responses from the parents of randomly selected 76 children were recorded. We included the children aged between 3 to 12 years and who previously used to go to school. The children having previous psychiatric problems had been excluded from the study. Before participating in the study written or verbal consent was obtained from the parents. After receiving the consent details of the study were explained. We assured every parent about the confidentiality of responses. The sample consisted of all the residential areas including rural, urban, and metro areas.

Result

40.8 % of children were of 6 to 10 years of age and the male and females were almost equal in number in our study (M: F = 40.36). Maximum children are from urban residences (about 59.2%) and the nuclear family (56.6%) followed by joint families (38.2%) and single-parent families (5.3%). In most of the cases (

61.8%) father is the only earning member followed by both parents working (34.2%) and in only 3.9% of cases, the mother is the only earning member of the family.

Table 1: Basic Socio-Demographic data of study participants

		Frequency	Percent
Age	11-15	23	30.3
	3-5	22	28.9
	6-10	31	40.8
Sex	M	40	52.6
	F	36	47.4
Residence	Metro	22	28.9
	Rural	9	11.8
	Urban	45	59.2
Family type	Joint	29	38.2
	Nuclear	43	56.6
	Single Parent	4	5.3
Occupation of Parents	Both Working	26	34.2
	Father Working	47	61.8
	Mother Working	3	3.9

We tried to assess the change of behaviour in children during this tough time. They were detached from school, friends and social activities for the last 2 yrs. About 76.3% of parents observed behavioural issues in their children. And the problems are mostly observed in 6 to 10 yrs of age. Males showed the problem most often than females (M: F = 33:25). Children from urban areas showed behavioural problems more often than in rural areas and metro cities. Children are having problems whose father is the only earning member of the family and where both parents were working.

Table 2: Changes in behaviour as per different socio-demographic parameters

(N	=76)	Change of Behaviour						
		No (n=18); 23.7%	Yes (n=58) 76.3%					
		23.7%	76.3%					
Age (yrs)	11-15	5	18					
	3-5	3-5	3-5	3-5	3-5	3-5	8	14
	6-10	5	26					

(N	=76)	Change o	f Behaviour				
		No Yes					
		(n=18); (n=58)					
		23.7%	76.3%				
Sex	M	7	33				
	F	11	25				
Residence	Metro	6	16				
	Rural	1	8				
	Urban	11	34				
Family type	Joint	5	24				
	Nuclear	12	31				
	Single parent	1	3				
Occupation of Parents	Both working	6	20				
	Father working	12	35				
	Mother Working	0	3				

The following table shows different behavioural problems and their frequencies.51.3% of children demand attention from their family members. 55.3% of children became restless and 46.1% became inattentive in family settings. 53.9% of children got distracted easily. Sleep pattern was more or less normal. A significant number of children (71.1%) increased their mobile use behaviour. 53.9% of children became anxious in different circumstances. 64.5% of children showed temper tantrums and 38.2% of children argued with their family members in various contexts. Watching television and mobile gaming increased more than before. 68.4% of children increased television watching and 59.2% of children increased playing mobile games.

Table 3: Frequencies of different behavioural issues

		Frequency	Percent
Demands	Often	39	51.3
attention	Rare	6	7.9
	Sometimes	31	40.8
Restlessness	Often	42	55.3
	Rare	11	14.5
	Sometimes	23	30.3

		Frequency	Percent
Inattention	Often	35	46.1
	Rare	11	14.5
	Sometimes	30	39.5
Easy	Often	41	53.9
distraction	Rare	8	10.5
	Sometimes	27	35.5
Sleep more	Often	26	34.2
	Rare	25	32.9
	Sometimes	25	32.9
Sleep less	Often	19	25.0
	Rare	37	48.7
	Sometimes	20	26.3
Increased	Often	54	71.1
mobile use	Rare	6	7.9
	Sometimes	16	21.1
Fearful	Often	4	5.3
	Rare	39	51.3
	Sometimes	33	43.4
Anxious	Often	41	53.9
	Rare	18	23.7
	Sometimes	17	22.4
Aggressive	Often	19	25.0
	Rare	24	31.6
	Sometimes	33	43.4
Disobedience	Often	29	38.2
	Rare	18	23.7
	Sometimes	29	38.2
Telling lie	Often	15	19.7
	Rare	26	34.2
	Sometimes	35	46.1
Temper	Often	49	64.5
tantrum	Rare	9	11.8
	Sometimes	18	23.7
Argues a lot	Often	29	38.2
	Rare	22	28.9
	Sometimes	25	32.9
Nail biting	Often	6	7.9
-	Rare	50	65.8
	Sometimes	20	26.3

		Frequency	Percent
Increased TV	Often	52	68.4
watching	Rare	5	6.6
	Sometimes	19	25.0
Increased	Often	45	59.2
mobile	Rare	11	14.5
gaming	Sometimes	20	26.3

Table 4: behavioural issues in different age groups, sex, family type, working status of parents

11	-15	A	ge (yrs	s)	5	Sex	F	amily ty	ly type Working		status of parents	
		3-5	6-10	F	M	Joint	Nuclear	Single parent	Both Working	Father Working	Mother Working	
Inattention	Often	9	9	17	15	20	16	17	2	13	21	1
	Rare	4	3	4	6	5	2	9	0	4	7	0
	Sometimes	10	10	10	15	15	11	17	2	9	19	2

Temper	Often	14	14	21	21	28	Table 5: Televisi					va	tching	3
tantrum	Rare	3	2	4	5	8	3	6	1100)	4		5	0
	Sometimes	6	6	6	10	4	6	11	1	Increa	ased ₅ wa	tch	ing of TV	Total
Increased	Often	16	16	22	28	26	21	31	2	Ofter	Rpre	S	ometimes	1
mobile use	Rare	2	2	2	1	5	2	Oŧten	C	38	3		8 4	49
	Sometimes	5	4	7	7	9	6	Rare	2	1	7		7 7	92
Increased	Often	14	16	22	19	33	1emper 17 tantrum	31 Somet	<u></u> 4	13	14		35	3
TV watching	Rare	2	1	2	2	3	4	1	lines (1 2		3	1-0-
	Sometimes	7	5	7	15	4	8	Total	C	52	10		19 9	76
										· ·	Mobile	116	e increased	

The table above shows different behavioural problems in different age groups. Mainly 6 to 10 yrs old children became inattentive mostly. All the other behavioural problems like temper tantrums increased mobile use and increased watching of television were observed mostly in the 6 to 10 yrs age group.

Inattention, temper tantrum and increased television watching were seen most often in males. But females were using mobiles more often than males.

All the behavioural problems of inattention, temper tantrums, increased mobile use and increased television watching are seen mostly in nuclear families.

Surprisingly the problems are most often seen where the father was working than both parents were working. Inattention, temper tantrums, and increased mobile and television use are seen in families where the father is the only working member.

8	Total 0	52	10	19 9	⁷ %
		N	Aobile	use increase	d
	Often	35	4	10	49
	Rare	4	2	3	9
	Sometimes	15	0	3	18
	Total	54	6	16	76

The above cross-tabulations shows behavioural issues (temper tantrum) in children who used Mobile phones and watch television more often. Temper tantrums increased in children who spend more time using the screen.

Discussion

We got 76 responses from different regions like metro cities, and urban and rural areas. During the pandemic, children were confined at home and when the pandemic related restrictions were withdrawn, little kids continues to show maladjusted behaviour. In our study, 76.3% of parents reported some behavioural and emotional problems in their children. Previous studies conducted during the early

phases of lockdown show various kinds of emotional and behavioural issues in children. (12)

In our study, we collected the data when strict restrictions were withdrawn. The kids started to go outside, but their emotional issues persisted which is most notable at 6 to 10 yrs of age. Our study matches with a study done on Chinese children which shows significant behavioural issues in a reopened school group. (13)

In our study children from rural areas were affected less often. It is assumed that housing conditions during the isolation phases have a definite impact on children's mental health. When the children have more access to spend time in nature, they are more healthy both physically and mentally. It is supported by one previous study which was conducted during the early phases of quarantine in three different European countries (14). In rural areas people were more reluctant to maintain restrictions. So the children could go outside and could mix and play with their friends.

In our study, we noticed children showed behavioural problems in attention, restlessness, easy distraction, sleep disturbances, fearfulness, anxiety, aggression, disobedience, temper tantrum, nail-biting and increased television and mobile phone use. The previous studies also showed similar findings in behavioural issues (15). During the isolation phases when kids were detached from their friends, relatives found the only way of pleasure is watching TV or mobile phone use. In some families, domestic violence increased during the isolation phases which changed the children's behaviour (16).

Temper tantrums increased in children who watched mobile and television more often and in nuclear families. Few previous studies also show similar findings where there was a positive correlation between screen time and behavioural and emotional symptoms ⁽¹⁷⁾. During the time of home confinement, children had less chance to ventilate emotions. Their pent up emotions were channelized into unacceptable emotional expressions.

Conclusion

We studied behavioural problems during the early phases of school opening after about 2 yrs of home confinement during Covid 19 pandemic. Most of the parents reported that their children were having different sorts of behavioural problems during this

period. The families of small children aged 6 to 10 yrs of age were facing various problems more often than children younger and older than this age group. The children of this age group showed problems more often as they were being isolated at home when they started to socialize and were in the discipline of school and society. Due to the sudden release of pressure of discipline all routine activities got disturbed. They spent most of their time watching television and different activities on mobile phones.

Most behavioural issues occurred in nuclear families where children got less chance to play with the family members who also got emotionally disturbed by the uncertainty of future, health and economy. The small kids with pent up emotional stress often behaved in a way that was not acceptable to their families.

A significant number of children (53.9%) became anxious in various family and social circumstances. During the pandemic, children spent most of their time with their families. They did not have a chance to socialize or attend the social gathering which ultimately provoked anxiety in the environment which is not very familiar to them.

Conflict of Interest: Nil Source of Funding: Nil

Ethical Clearance: Informed consent was obtained from each participant. Only willing parents participated in the study. They were assured to keep the information confidential. Respondents were asked that they have full right to withdraw from the study if they feel embarrassed to answer any question. Ethical clearance was not obtained for the study.

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