

Understanding the perceived health outcomes of children during COVID-19 pandemic

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Abstract

The study explored the lockdown and quarantine on the perceived psychological distress and other life outcomes of children after the outbreak of COVID-19 in recent past. The study employed the Narrative Thematic Research Design and chose a heterogeneous sample of 20 full-time mothers to report the experiences of the restrictions of their children aged 9-11 years. These mothers were the primary source of data about the impacts of lockdown and quarantine on their children. A telephonic semi-structured interview protocol was used to collect data. Four themes were generated: poor social and emotional responsivity, decreased interest in studies and other creative activities, psychological distress symptoms and negative health outcomes. Anxiety, irritation, quarrelling behaviours, anger, frustration, low feeling, reduced interest in games, boredom etc. were observed in children. Sleep disturbances, complaints of indigestion and multiple complaints of body aches were major negative health outcomes. The findings showed a variety of negative psychological and health outcomes for children due to the extreme restrictions, uncertainty, apprehension, reduced positive engagement and lowered social connection after the outbreak of the pandemic. Preventive and protective measures are recommended with concerted efforts of parents, school and community to guard children against the ill-consequences of current and future pandemics.

Keywords: children; COVID-19; life outcomes; pandemic; perceived psychological distress, narrative thematic analysis.

Practitioner Points

- Ø Poor social and emotional responsivity, decreased interest in studies and other creative activities, psychological distress symptoms and negative health outcomes were perceived negative consequences of COVID-19 for children.
- Ø Extreme restrictions, uncertainty, apprehension, reduced positive engagement and lowered social connection after the outbreak of the pandemic were major reported factors leading to negative life outcomes for children.
- Ø The concerted efforts of parents, school and community may be helpful to guard children against the ill-consequences of current and future pandemics.

Introduction

Currently, the entire human society is facing unprecedented and unparallel restrictions, fear and anguish due to the havoc created by COVID-19. The pandemic of COVID-19 has been an unexpected, novel and threatening which is caused by a coronavirus (SARS-CoV-2) which leads to a severe respiratory illness accompanied by the symptoms of cough, fever and difficulty in breathing (Li et al., 2020; Liu et al., 2020; World Health Organization, 2020a). The unavailability of vaccine or medicine has made this pandemic to culminate in severe mass distress, uncertainty, fear and challenges to the health and well-being outcomes of children and adults (Jiao et al., 2020).

About three million confirmed (2, 626, 321) and death (181, 938) cases worldwide caused by COVID-19 are indicative of the gloomy picture created by it (World Health Organization, 2020). Among others, children of all age groups belonging to all societies have become the biggest victim of the current pandemic that may have profound effects on their life outcomes and well-being (United Nations Organization, 2020). Their life outcomes may differ in severity and duration depending upon the economic, social and health conditions of children and their families (United Nations Organization, 2020). Due to sudden suspension of schools of more than 1.5 billion worldwide due to COVID-19 in more than 210 countries since April 8, 2020, and other restrictions, children are facing severe access to the resources, social support, face-to-face services and disrupted routines (United Nations Organization, 2020).

The United Nations Organization (2020) has feared that it may lead to severe psychological distress, domestic violence, child abuse, neglect and exploitation for children. The longer inactivity of children due to school closures, strict social distancing and fear of COVID-19 may have a deleterious effects well-being of children (Avenue et al., 2020; Lee, 2020). The earlier observations of the effects of natural disasters, traumatic events and shorter social distancing during epidemics have been reported to cause negative mental health symptoms, substance use, domestic violence and abuse in children. The effects of COVID-19 may be assumed to exert more negative life outcomes (depression, anxiety, domestic violence and loneliness) for children as it was more severe, unknown and fatal (Galea et al., 2020; G. K. Tiwari, Pandey, et al., 2020; G. K. Tiwari, Rai, et al., 2020).

Children may not remain unaffected from the negative consequences of the whole environment filled with extreme fear, uncertainties, social distancing and prolonged deprivation of schooling experiences (Jiao et al., 2020). A recent study 320 children with age ranging from 3 to 18 years in China reported extreme emotional attachment, disturbance, irritability and extreme fear about knowing about the epidemic (Jiao et al., 2020). Besides, the study also observed disturbed sleep, nightmares, irregular appetite, ill-physical symptoms, discomfort, anger, inattention and excessive emotional attachment in children (Jiao et al., 2020; Tiwari, Kashyap, et al., 2020).

Previous studies have been confined to the assessment of the impacts of less severe natural or man-made adversities on the life outcomes of children (Klein et al., 2009) and thus, there is a clear gap in addressing the effects of the restrictions, uncertainty and fear of COVID-19 like pandemic on the life outcomes of children (Lee, 2020; United Nations Organization, 2020). In this backdrop, the present study aims to explore the consequences of COVID-19 on the psychological distress and other life outcomes of the children with the age ranging from 9 years to 11 years as perceived by their full-time mothers employing the Narrative Thematic Analysis (Creswell, 2014). In Indian society, the whole life of a full-time mother revolves around her children and she is well-known to the experiences of her children (Ahirwar et al., 2019). Besides, understanding the mothers' perception of the distress of their children will help to develop an in-depth understanding of the real impacts and come up with a proper intervention plan. This age group was chosen as the children of this age group carry some ability to understand the severity and impacts of restrictions of COVID-19. Besides, their life goals related to the social, interpersonal, health and academic areas are relatively explicit and they have a proper sense of social connection, peer relation and future-orientation. These children are also capable of sharing their experiences with their caregivers and have some understanding of social realities and broader human collectives. A qualitative design was chosen for two reasons. First, it

has been suggested that a qualitative design is most useful when there is no guiding framework or theory (Creswell, 2014). Second, the restrictions of the nationwide lockdown in India did not allow face-to-face interactions for a large quantitative data collection.

Methods

The study employed the Narrative Thematic Analysis (Creswell, 2014) that used a telephonic semi-structured interview protocol for data collection. Using a purposive sampling method, 27 mothers were contacted through telephonic calls at first. Out of these, only 20 (Age Range = 28-54 years, M = 41.15, SD = 6.54) gave their telephonic consent to answer the questions regarding the impacts of COVID-19 on the behaviour and performance of their children (Age range = 9-11 years, M = 10.08, SD = 0.65). Out of 20 children, 7 (Age range = 9-11 years, M = 10.14, SD = 0.75) were males and 13 were females (Age range = 9-11 years, M = 10.04, SD = 0.63). Only those mothers were included in the study whose children aged between 9 to 11 years and who have been a full-time caretaker of their children. The full-time mothers may be assumed to represent the information-rich for their children behaviours and experiences (Patton, 2015). The sample size was determined as per the suggestions relevant for a narrative thematic study based on purposive sampling (Guest et al., 2006). The biographic information has been given in Table 1. According to the suggestions of the American Psychological Association Journal Article Reporting Standards (Levitt et al., 2018), details which characterized the research design, research team, contributions, sample extraction, participant recruitment, data collection, data analysis procedure and methodological integrity in this study have been presented in Table 2.

Table 1. Demographic features of the mothers and their children

S. No.	Details of the Mothers	Children
Age	Education	Family
1.	45	Postgraduate
2.	54	Secondary
3.	48	Postgraduate
4.	38	Postgraduate
5.	43	Postgraduate
6.	50	Secondary
7.	39	Graduate
8.	51	Matriculation
9.	46	Graduate
10.	32	Intermediate
11.	28	Graduation
12.	38	Graduate
13.	35	Postgraduate
14.	42	Graduate
15.	41	Postgraduate
16.	42	Postgraduate
17.	41	Postgraduate
18.	36	Postgraduate
19.	38	Postgraduate
20.	36	Graduate

Table 2. Detailed descriptions of the methods⁺

S. No.	Components	Descriptions
1.	Research Design	A telephonic semi-structured interview protocol for data collection, Narrative Thematic
2.	Research Team	First and sixth authors have a good background in qualitative research in Psychology. 7
3.	Contributions	Authors 1 & 6: conceptualization, analysis and manuscript writing, Authors 2, 3, 4 & 5
4.	Sample Extraction	Out of 25 initially contacted, 20 mothers gave their consent and the rest did not partici
5.	Participant Recruitment	The participants were known to the researchers before the study, Not paid any compens
6.	Data Collection	Data from each participant were collected in a single attempt through telephonic contac
7.	Data Analysis	The Narrative Thematic Method was used for data analysis (Creswell, 2014). The analy
	Methodological integrity	The evaluation of the data adequacy, analysis approach, frequent discussion, attending t

+ The guidelines of the American Psychological Association Journal Article Reporting Standards (Levitt et al., 2018) were the source of these details.

Results

Four themes were generated after the data analysis through the Narrative Thematic Analysis regarding the perceived psychological distress and other life outcomes of the children during the lockdown and quarantine. The results have presented with representative excerpts.

Theme 1: Children showed poor emotional and social responses during the lockdown.

Majority of the mothers reported poor emotional responses of their children. One mother shared her experiences of her son:

Initially, my son was very happy to hear a long holiday... After two weeks, he expressed fear and apprehension about his studies. He does not look happy... He does not talk properly... (M_9)

Another mother reflected similarly:

My daughter was worried about the longer school closure... she is annoyed due to restrictions to meet and play with her friends... bored, and quarrels with her siblings... shows more stress and aggression... She is upset about her changed routine... does not complete her work timely... spends maximum time on mobile... she is stressed about the burden of the homework. (F_10)

A mother reported unusualness in her daughter's behaviours:

After two weeks of lockdown, she is spending her most of the time in watching television... her social interaction has deteriorated... she has become less talkative... She misses her friends and school... she shows boredom and sadness. (F_10)

Theme 2: A decreased interest in studies and other creative activities of children were reported.

The mothers reported that the cognitive abilities, interest, language abilities, creative activities, likings, and reading abilities of their children got seriously affected due to the lockdown. One mother reported some negative effects of restrictions:

In the beginning, it was almost right but after 10-12 days of lockdown, her learning and understanding got badly affected... her self-motivation was sudden reduced and her studies were put on the lowest priority... She reported reduced stimulation and boredom. (F_11)

Another mother shared her similar observations for her daughter:

My daughter was happy that there is a long holiday but when she came to know that she cannot meet anyone outside and she may not be allowed to play and visit her friends. . . She became sad, irritated and felt down. . . We tried to make her understand but she did not hear us. . . She was very good in drawing and painting and used to make paintings on inner walls of house. . . but she lost her interest in all these. . . It may be due to the restrictions on her play, interaction and freedom after lockdown. . . It seemed that her abilities went down. . . She showed ill-health symptoms and reduced performance in all activities. (F_10)

Another mother reported similarly:

I am observing reduced interest in studies, play and other activities of my daughter. . . It is surely due to restrictions on her autonomy to have social interactions with other people especially her friends. . . She almost lost her interest in all creative and constructive activities. . . She moves aimlessly here and there. . . Her physical activities have gone down. . . She looks sad and demotivated. . . Her interest in studies has gone down after lockdown. (F_11)

Theme 3: Children showed unusual symptoms of psychological distress due to the restrictions.

Many psychological distress symptoms in their children were also reported by mothers. One mother reflected as:

Initially, my daughter was unable to understand the meaning of lockdown. . . After a few days of lockdown, she started showing anxiety, resistance, anger, irritation, frustration. . . I have tried hard to explain the present ongoing scenario, on which she expresses resistance. . . She expresses fear of the disease. . . She puts illogical arguments. . . She has become apprehensive. . . She becomes easily irritated, restless and angry. . . Her emotional expressions have become negative and incongruent. (F_11)

Similar experiences were shared by another other:

It is quite a difficult time for us and it has become very difficult to keep children inside homes, especially during their playing hours. . . She has now become irresistible. . . It is very challenging for us to handle her anxiety. . . She shows lethargic attitude and depressive symptoms. . . She frequently reports boredom, isolation, decreased stimulation and lowered taste in food. . . She misses school. . . She feels down, apprehensive, tired and hopeless. . . She also shows irritation and frustration. . . She shows more frequent anxiety, irritation, anger, hopeless and restlessness. . . She shows concerns about restrictions and getting infected. (F_9)

Theme 4: Many negative physical health symptoms were observed in the children after the lockdown.

The lockdown has also catalyzed many ill-health symptoms which were generally absent before the restrictions imposed after the outbreak of COVID-19. For example, one mother shared her experiences of her son:

After two weeks of lockdown, I have seen many health issues with my son. . . He hardly takes food properly. . . His routine of sleep, wake and play have gone seriously disturbed. . . Nowadays, he does not enjoy a sound and complete sleep. . . He also goes to his bed very late. . . His movement and enthusiasm have become absent. . . He frequently complains indigestion, lowered activity and multiple complaints of body ache. (M_11)

Another mother reported similar symptoms in her daughter:

After a few days of lockdown, my daughter started showing a decrease in the level of hunger. . . She has now developed sleep disturbance. . . She reports an incomplete or disturbed sleep every morning. . . She has become unorganized and lazy. . . She is also losing interest in play as there are no friends available to play with her. (F_9.5)

Similarly, another mother showed concerns for her daughter's poor health:

With the start of lockdown, she has been active and had a good appetite but after two weeks of lockdown, her food intake is decreasing day-by-day. . . She has become stubborn now. . . She frequently complains stomach aches. . . She also frequently reports poor and disturbed sleep. . . She becomes easily annoyed with poor taste in food. (F_10)

Discussion

The findings showed that the restrictions of lockdown, social distancing and quarantine negatively affected the life outcomes of children. The children showed decreased emotional and social responses due to extreme restraints due to lockdown (Theme 1). Social interaction, play behaviours, expression of positive emotions, approaching behaviours were replaced with poor interaction, sadness, quarrelling behaviours, aggression, withdrawal, disturbed routine and boredom.

Majority of the children exhibited a decreased interest in studies and other creative activities (Theme 2). This may be due to school closure, and lack of proper stimulation and social reference. It has been argued that motor activities and social interaction of children have a close connection with the proper functioning of their cognitive abilities and health outcomes (Evans, 2003; Fedewa et al., 2018). The company of likeable persons and friends help people to learn face success and failures in their life and these influences are more important for children (Spence, 2006). It has also been suggested that the negative consequences for children may have become serious during longer restrictions due to the lack of a regular and substitute structure of learning because explicit rules, schedules, expectations facilitate self-discipline, impulse control and a sense of control essential for the social, emotional and psychological development as well engagement in creative works of children (Healio Psychiatry, 2020).

Majority of the mothers reported their children to exhibit a variety of psychological distress symptoms due to the lockdown (Theme 3). Major distress symptoms were anxiety, resistance, anger, irritation, stubborn, frustration, fear of the disease, apprehension, negative emotions, hopelessness, irresistibility, lethargic attitude, depressive symptoms, isolation, decreased stimulation, frustration and restlessness. It was also reported that the children develop many new negative physical health symptoms due to the restrictions during the lockdown (Theme 4). Sleep disturbance, poor appetite, disinterest in play activities, slow movement, reduced enthusiasm, indigestion, body ache and reduced taste in food were chief ill-health symptoms reported by the mothers for their children.

The current epidemic was unparalleled severe and pervasive in its effects for children. Children are very sensitive to the severe changes in the environment. Restrictions on social connection, forced isolation, decreased activity and disengagement from meaningful activities like schooling, play and relationships have been suggested to lower psychological and health outcomes (Paules et al., 2020). Previous studies have also suggested that connectedness has positive links with adjustment, achievements, health and productivity and negative association with negative psychological and health outcomes of children (Foster et al., 2017). According to the Attachment Theory (Bowlby, 1958) and the Buffering Hypothesis (Cohen & Wills, 1985), social and peer relationship are unavoidable sources of affiliation, love, positive emotions, satisfaction, positive stimulation, meaningfulness, tangible resources, pro-social behaviours, positive engagement and opportunities of learning which work in all conditions for all age groups of people. In essence, reduced freedom and enhanced restrictions (movement, activity, play etc.), reduced social interactions (friends, peers, neighbours etc.), a negative emotional environment in the family and community, uncertainty and percolations of negativity of family members may be working behind the positive life outcomes of children during the lockdown due to

COVID-19. The findings may carry significant policy, practice and research implications. The interventions involving media, family and community may protect the health and well-being of children and help them to deal effectively with their cognitive, emotional and behavioural issues more effectively. Proper care of sleep, food, leisure and creative activities of children to help them to achieve their full productivity and remain healthy and well-functioning are recommended. A positive outcome of the joint family was surfaced where children may feel more protected and may find an opportunity to remain positively engaged.

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