



LIVING WITH COVID-19: A SCHOOL GOING CHILD'S PERSPECTIVE

Medical Science

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ABSTRACT

Introduction: The world is experiencing unprecedented challenges from COVID-19, the coronavirus pandemic. Children are less susceptible, yet their lives have changed in profound ways. They are hit the hardest by psychosocial impact of this pandemic. This is a universal crisis and the impact will be lifelong for some children. Being quarantined in homes and institutions can impose greater psychological burden than the physical sufferings that may be caused by the virus. Closure of schools, lack of outdoor activity, etc. can potentially create monotony, distress, impatience, annoyance and varied neuropsychiatric manifestations.

Aims and Objectives: The aim of this study was to understand the perspectives of school going children towards COVID-19 pandemic in order to create child centric communication to address their most important concerns.

Materials and Methods: A Cross-sectional and descriptive study was conducted during the month of May & June 2020. The data was collected by Snowball sampling through a national level survey. The study population included all the school going children willing to participate in the study and this included children from private schools, government schools and schools for the specially abled.

Results: Respondents - About 7,000 responses were obtained from almost all states and union territories. A few international responses from countries such as Indonesia, USA, Australia, Japan, UK etc were also received. Most of the respondents were of age 14 or below with almost equal gender distribution. The top 5 responding regions were Delhi, Haryana, Uttar Pradesh, Odisha and Rajasthan.

Causes of spread - About half (50%) of the respondents felt that either meeting an infected person or touching something that they had touched would lead to the spread of the virus. Most children felt that they can avoid catching the virus by:

1. Maintaining a 6 feet distance between one another
2. Washing hands regularly
3. Avoiding crowded areas.

Communication channels: The main channel of communication for information has been news channels for people in majority of the states, of all age groups as well as both genders. The second most used channel of communication has been social media for a few states and government advisories for others.

Fears - Most of the respondents were scared of the fact that it is uncertain when COVID-19 will end while others were concerned over no cure being found as yet. This trend was similar between different age groups, genders and majority of the states.

Hopes - Children in most states and of both genders are mostly looking forward to being able to go to normal school once again while children above the age of 17 are looking forward to going out once the pandemic ends.

Conclusion: The children were aware of the basic facts about the virus, the mode of its spread, methods of prevention of the infection. They want to know when the pandemic would end, how to live with it, how an infected person could be cured and when the vaccine would be made available.

KEYWORDS

INTRODUCTION:

The world is experiencing unprecedented challenges from COVID-19, the coronavirus pandemic.(1)

Children are less susceptible, yet their lives have changed in profound ways. They are hit the hardest by psychosocial impact of this pandemic. This is a universal crisis and the impact will be lifelong for some children.(2)(3) Being quarantined in homes and institutions can impose greater psychological burden than the physical sufferings that may be caused by the virus. Closure of schools, lack of outdoor activity, etc. can potentially promote monotony, distress, impatience, annoyance and varied neuropsychiatric manifestations.(3)

The Children infected with COVID-19 have milder illness, low morbidity, better prognosis and probably lesser susceptibility (4)(5)(6)(7). Yet psychosocial impact is huge. The short-term and long-lasting psychosocial impact is increasingly being recognized all over the world. (8) Being quarantined at home or elsewhere is a psychological burden and has varied neuropsychiatric manifestations and psychosocial stigma.(9) Confinement in home may cause immediate and lingering psychosocial impact on children due to drastic change in their lifestyle, physical activity and mental excursions.(8) The Children who get quarantined at institutions are the worst sufferers as support of their parents is not available.(10)

AIM:

The aim of this study was to understand the perspectives of school

going children towards COVID-19 pandemic in order to create child centric communication to address their most important concerns.

Objectives:

1. Understand the impact of COVID-19 on school going children through an online survey.
2. Create child centric communication to address their most important concerns.

Methods:

Type of Study: Cross-sectional, descriptive

Study period: May – June 2020

Sampling Method: Snowball sampling through a national level survey

Study Population: All school going children willing to participate in the study. This included children from private schools, government schools and schools for the specially abled.

A survey questionnaire was formulated by brainstorming, which was followed by validation by experts. This questionnaire was then shared with respondents through Google Forms. Responses were obtained for a period of 2 months from May to June 2020. The responses were analyzed with the help of Microsoft Suite.

RESULTS:

About 7,000 responses were obtained from almost all states and union territories in India - from Jammu & Kashmir to Kerala and from Gujarat all the way to Arunachal Pradesh (Figure 1). A few international responses were also received from countries such as Indonesia, USA, Australia, Japan and UK (Table 3).



Figure 1. Geographical Distribution

The states highlighted in green were covered by the survey

Age & Gender: Most respondents were of age 14 or below (Table 1A). The gender distribution of respondents was approximately 50-50 (Table 1B).

Table 1A: Age Distribution

Age Group	Percentage
Below 12	44%
12 to 14	31%
15 to 17	18%
Above 17	7%
Grand Total	100%

Table 1B: Gender Distribution

Age Groups and Gender			
Age Group	Female	Male	Total
Below 12	47%	52%	100%
12 to 14	53%	46%	100%
15 to 17	48%	52%	100%
Above 17	38%	62%	100%
Grand Total	49%	51%	100%

Respondents by Region (Tables 2A & 2B)

The top 5 responding regions were (Table 2A):

1. Delhi
2. Haryana
3. Uttar Pradesh
4. Odisha
5. Rajasthan

The top 5 responding countries were (Table 2B):

1. India
2. Indonesia
3. Singapore
4. USA
5. United Kingdom

Table 2A: Respondents by State (within India)

States/Union Territories	Female	Male	Total
Delhi	1091	927	2035
Haryana	628	827	1467

Uttar Pradesh	433	475	915
Odisha	448	455	904
Rajasthan	163	158	325
Other/Unkown	108	111	223
Tamil Nadu	84	95	181
Jammu & Kashmir	87	62	149
West Bengal	48	82	130
Assam	65	47	112
Bihar	38	61	99
Kerala	39	39	78
Punjab	31	41	72
Jharkhand	20	40	60
Maharashtra	11	8	19
Meghalaya	7	10	17
Uttarakhand	5	5	12
Arunachal Pradesh	3	9	12
Madhya Pradesh	6	4	10
Telangana	3	5	8
Himachal Pradesh	1	6	7
Andhra Pradesh	1	5	6
Karnataka	4	1	5
Puducherry	4		4
Tripura		2	2
Nagaland	1	1	2
Gujarat		2	2
Chattisgarh	2		2
Goa	1		1
Sikkim		1	1
Total	3332	3479	6860

Table 2B: Respondents by Country

Countries	Female	Male	Total
India	3332	3479	6860
Indonesia	83	72	157
Singapore		10	11
USA	2	5	10
United Kingdom	3	1	5
Denmark	1		1
Australia		1	1
Korea		1	1
Nepal		1	1
Saudi Arabia		1	1
Dubai		1	1
Total	3421	3572	7049

What do you think are the main causes for the spread of the virus ?
Around 50% of the respondents felt that either meeting an infected person or touching something that an infected person had touched would lead to the spread of the virus (Table 3)

Table 3: Causes for the spread of the virus

Cause for the spread of Virus	Percentage
When you come in contact with a COVID-19 infected person	26
When you touch something a COVID infected person has touched	21
Coughing and sneezing	16
Being in a crowded area	16
Low Immunity	13
Eating Outside	5
Drinking unfiltered water	3
Total	100

According to you, what are the best measures to prevent yourself from catching the virus?

Most children feel that they can avoid catching the virus by maintaining 6 feet distance, washing hands regularly and avoiding crowded areas (Table 4).

Table 4: Measures to prevent yourself from catching the virus

Measures to prevent yourself from catching the virus	Percentage
Washing your hands regularly	21
Wearing a mask when you go out	19
Maintaining a distance of 6 feet	14
Avoiding crowded areas	9

Avoiding touching your face	7
Avoiding physical contact with outsiders	6
Self quarantine	6
Eating healthy	5
Checking your temperature regularly	3
Drinking hot beverages	3

All the above	7
Total	100

Where have you learnt the most about COVID-19 from?

The main channel of communication for information has been news channels for people in majority of the states (Table 5A), of all age groups (Table 5B) as well as both genders (Table 5C). The second most used channel of communication has been social media for a few states and government advisories for others.

Table 5A: Source of Knowledge (State wise)

5A	Source							
State	Friends and family	Government advisory	Internet	News Channels	School	Social media	Other	Total
Delhi	7%	7%	9%	54%	3%	15%	6%	100%
Haryana	6%	8%	7%	60%	2%	13%	4%	100%
Uttar Pradesh	14%	8%	11%	45%	4%	13%	5%	100%
Rajasthan	3%	14%	6%	53%	1%	16%	8%	100%
Tamil Nadu	2%	8%	2%	65%	4%	15%	6%	100%
Jammu & Kashmir	16%	6%	3%	62%	0%	8%	5%	100%
West Bengal	6%	12%	18%	39%	0%	21%	5%	100%
Assam	12%	4%	9%	51%	0%	21%	4%	100%
Bihar	5%	17%	10%	49%	0%	16%	2%	100%
Kerala	9%	15%	5%	45%	0%	24%	1%	100%
Jharkhand	2%	5%	10%	62%	0%	18%	3%	100%
Maharashtra	21%	16%	5%	32%	11%	11%	5%	100%
Meghalaya	24%	6%	6%	47%	0%	18%	0%	100%
Uttarakhand	0%	25%	0%	33%	8%	25%	8%	100%
Arunachal Pradesh	17%	8%	0%	50%	0%	8%	17%	100%
Madhya Pradesh	10%	20%	20%	20%	0%	20%	10%	100%
Telangana	0%	0%	25%	75%	0%	0%	0%	100%
Himachal Pradesh	0%	0%	14%	86%	0%	0%	0%	100%
Andhra Pradesh	0%	33%	0%	33%	0%	17%	17%	100%
Karnataka	20%	20%	40%	20%	0%	0%	0%	100%
Puducherry	0%	25%	0%	25%	0%	50%	0%	100%
Tripura	100%	0%	0%	0%	0%	0%	0%	100%
Gujarat	50%	0%	0%	50%	0%	0%	0%	100%
Goa	0%	0%	0%	0%	100%	0%	0%	100%
Sikkim	0%	100%	0%	0%	0%	0%	0%	100%
Other/Unkown	8%	7%	11%	45%	5%	16%	8%	100%
Total	8%	9%	9%	53%	2%	15%	5%	100%

Table 5B. Source of Knowledge (Age wise)

5B	Source								
Age Group	Doctors	Friends and family	Government advisory	Internet	News Channels	School	Social media	Other	Total
Below 12	3%	11%	9%	6%	56%	2%	12%	1%	100%
12 to 14	4%	7%	8%	9%	53%	3%	15%	1%	100%
15 to 17	3%	5%	7%	14%	48%	2%	20%	1%	100%
Above 17	5%	1%	18%	12%	44%	1%	17%	1%	100%
Total	4%	8%	9%	9%	53%	2%	15%	1%	100%

Table 5C. Source of Knowledge (Gender wise)

From where have you learnt the most about COVID-19 from?									
5C	Source								
Gender	Doctors	Friends and family	Government advisory	Internet	News Channels	School	Social media	Other	Total
Female	4%	8%	9%	8%	52%	3%	15%	1%	100%
Male	4%	7%	9%	9%	54%	2%	14%	1%	100%
Total	4%	8%	9%	9%	53%	2%	15%	1%	100%

What about COVID-19 makes you nervous or scared?

Most respondents were scared of the fact that it is uncertain when COVID-19 will end while others were concerned over no cure being found as yet. This trend was similar between majority of the states (Table 6A), different age groups (Table 6B) and genders (Table 6C).

Table 6A: Reason for Fear (State wise)

6A	Reason					
State	I don't know enough about it	I don't know when it will end	I might get it	There's no cure	Other	Total
Delhi	9%	42%	12%	33%	4%	100%

Haryana	6%	43%	10%	37%	5%	100%
Uttar Pradesh	3%	34%	12%	47%	4%	100%
Odisha	5%	40%	16%	37%	2%	100%
Rajasthan	9%	39%	14%	35%	3%	100%
Tamil Nadu	9%	46%	14%	27%	4%	100%
Jammu & Kashmir	3%	36%	15%	44%	3%	100%
West Bengal	5%	32%	27%	31%	5%	100%
Assam	4%	49%	15%	29%	4%	100%
Bihar	5%	40%	9%	44%	1%	100%
Kerala	3%	50%	13%	31%	4%	100%
Punjab	8%	38%	6%	47%	1%	100%
Jharkhand	5%	33%	18%	43%	0%	100%
Maharashtra	11%	42%	11%	37%	0%	100%

Meghalaya	0%	59%	6%	29%	6%	100%
Uttarakhand	8%	67%	0%	25%	0%	100%
Arunachal Pradesh	0%	58%	17%	25%	0%	100%
Madhya Pradesh	0%	70%	0%	30%	0%	100%
Telangana	25%	13%	0%	63%	0%	100%
Himachal Pradesh	0%	71%	0%	29%	0%	100%
Andhra Pradesh	0%	50%	17%	17%	17%	100%
Karnataka	0%	60%	0%	40%	0%	100%
Puducherry	0%	75%	0%	25%	0%	100%
Tripura	50%	0%	0%	50%	0%	100%
Nagaland	0%	50%	50%	0%	0%	100%
Gujarat	0%	0%	0%	50%	50%	100%
Chattisgarh	0%	0%	0%	100%	0%	100%
Goa	0%	100%	0%	0%	0%	100%
Other/Unkown	6%	39%	10%	38%	7%	100%
Total	6%	41%	12%	37%	4%	100%

Table 6B: Reason for Fear (Age wise)

6B						
Age Group	Reason					
	I don't know enough about it	I don't know when it will end	I might get it	There's no cure	Other	Total
Below 12	6%	40%	14%	38%	3%	100%
12 to 14	6%	40%	13%	37%	4%	100%
15 to 17	8%	44%	9%	34%	6%	100%
Above 17	5%	41%	13%	37%	3%	100%
Total	6%	41%	12%	37%	4%	100%

Table 6C: Reason for Fear (Gender wise)

6C						
Gender	Reason					
	I don't know enough about it	I don't know when it will end	I might get it	There's no cure	Other	Total
Female	6%	41%	13%	37%	4%	100%
Male	7%	41%	12%	36%	4%	100%
Total	6%	41%	12%	37%	4%	100%

What do you look forward to most after this pandemic ends?

Children in most states (Table 7 A) and of both genders (Table 7 C) are mostly looking forward to being able to go to normal school once again while people above the age of 17 (Table 7B) are looking forward to going out once the pandemic ends.

Table 7A. What respondents are looking forward to (State wise)

7A						
State	Activity					
	Being able to go out	Eating outside food	Meeting friends	Normal school	Other	Total
Delhi	26%	6%	23%	39%	6%	100%
Haryana	27%	3%	22%	40%	8%	100%
Uttar Pradesh	29%	5%	23%	38%	5%	100%
Odisha	26%	2%	12%	56%	4%	100%
Rajasthan	29%	7%	14%	44%	6%	100%
Tamil Nadu	31%	4%	19%	41%	5%	100%
Jammu & Kashmir	26%	5%	17%	50%	1%	100%
West Bengal	32%	6%	25%	28%	8%	100%
Assam	27%	3%	16%	51%	4%	100%
Bihar	28%	7%	17%	42%	5%	100%
Kerala	35%	4%	21%	38%	3%	100%
Punjab	26%	4%	29%	35%	6%	100%
Jharkhand	32%	8%	22%	37%	2%	100%
Maharashtra	26%	5%	37%	32%	0%	100%
Meghalaya	29%	0%	12%	53%	6%	100%
Uttarakhand	17%	0%	8%	75%	0%	100%
Arunachal Pradesh	42%	0%	8%	50%	0%	100%
Madhya Pradesh	0%	0%	20%	70%	10%	100%
Telangana	38%	13%	25%	0%	25%	100%
Himachal Pradesh	29%	0%	14%	57%	0%	100%
Andhra Pradesh	0%	17%	17%	50%	17%	100%
Karnataka	40%	0%	0%	40%	20%	100%
Puducherry	50%	0%	25%	25%	0%	100%
Tripura	0%	0%	50%	50%	0%	100%
Nagaland	0%	0%	0%	100%	0%	100%
Gujarat	0%	50%	50%	0%	0%	100%

Chattisgarh	100%	0%	0%	0%	0%	100%
Goa	0%	0%	0%	100%	0%	100%
Sikkim	0%	0%	0%	100%	0%	100%
Other/Unkown	23%	9%	21%	40%	7%	100%
Total	27%	5%	21%	41%	6%	100%

Table 7B. What respondents are looking forward to (Age wise)

What do you look forward to most after this pandemic ends?						
Age Group	Activity					
	Being able to go out	Eating outside food	Meeting friends	Normal school	Other	Total
Below 12	28%	3%	18%	45%	6%	100%
12 to 14	25%	6%	23%	40%	6%	100%
15 to 17	28%	4%	25%	37%	5%	100%
Above 17	36%	4%	19%	32%	9%	100%
Total	27%	5%	21%	41%	6%	100%

Table 7c. What respondents are looking forward to (Gender wise)

7C						
Gender	Activity					
	Being able to go out	Eating outside food	Meeting friends	Normal school	Other	Total
Female	28%	4%	20%	42%	6%	100%
Male	27%	5%	22%	40%	6%	100%
Total	27%	5%	21%	41%	6%	100%

CONCLUSIONS & DISCUSSION**What the children were aware of**

- Basic facts about the virus
- How it is spread
- How to prevent the infection
- Social distancing and the message of 'stay home stay safe'

Want Children wanted to know

- When it would end
- How to live with it
- How an infected person could be cured
- When the vaccine would be made
- How they could keep themselves and their families safe

What children were affected by:

- Not being able to meet friends
- Having to learn using online platforms

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