Original Research

Assessment of Community Accordance to the Essential Actions at School Level and Support for Reopening in Covid Era

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Abstract

Background: The emergence of a novel strain of Coronavirus, now named SARS-CoV-2, in Wuhan city, China, in late 2019, resulted in a global pandemic that spread to every region of the world. Various measures like social distancing, wearing masks including closure of schools became the new normal. The decision to close schools is to bring stability between the risk associated with transmission in the school environment and the educational and welfare impact upon children of shutting down education establishments. While countries in the region are at various phases of evolution of the COVID-19 pandemic, facing a combination of common and unique challenges, each has begun to prepare and effectuate the safe reopening of schools.

Objective: To assess community accordance to the essential actions at school level and support for school reopening in covid era and factors responsible for it.

Methodology: A community based cross-sectional study was conducted among adults who were parents/ care takers/guardians of school children aged 5-15years residing in urban area. The proforma comprised of sociodemographic profile and the 21 Actions at School level as per WHO recommendation. Data was collected using Google Forms. Responses were presented as frequencies, percentages and Chi-square test.

Results: A total of 615 adults were enrolled for the study. 44.44% of study participants accepted the 21 actions at school level and were in favour of school reopening. 60% were 32–45 years, 63.25% were literates and maximum were females. Significant associations were observed with study participants with younger age ($p<0.0001$), residing in nuclear families and children enrolled in private schools ($p<0.00001$), were more in favour of accepting the 21 actions at school level and willing to send the children back to school.

Conclusion: There is a need to revaluate purpose, content and modes of delivery of education and to make adjustments that in the future strengthen multiple flexible learning pathway introduce innovative pedagogical models, and incorporate crisis-sensitive planning.

Keywords: Accordance, 21 Actions by WHO, Community, Coronavirus, Pandemic, Reopening, School, Support.

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Introduction

The emergence of a novel strain of coronavirus, now named SARS-CoV-2, in Wuhan city, China, in late 2019, has resulted in a global pandemic that spread to every region in the world.[1] As the number of confirmed cases increased both nationally and globally, there was a concern that hospital and intensive care capacities would be rapidly overwhelmed without the introduction of interventions to curb the spread of infection. With this in mind, many countries introduced a range of social distancing measures, such as the closing of workplaces, pubs and restaurants, the restriction of leisure activities and the closing of schools.

The decision to close schools is a balance between the risk associated with transmission in the school environment and the educational and welfare impact upon children of shutting down education establishments.[2]

Schools closed in many countries for some period of time during COVID-19 pandemic as part of mitigation efforts to reduce transmission of SARS-CoV-2. While the duration of school closures is still uncertain, past experience (other epidemics, conflicts and natural disasters) shows that widespread and extended school closures represent a serious risk to the learning, protection and welfare of children and adolescents.

Reopening schools is a government decision, which may be made on the basis of epidemiological evidence and analysis of benefits and risks in education, public health and socio-economic factors in the local context.

This pandemic has paved way for developing long-term strategies that address pre-existing gaps and challenges, making learning accessible to all, and developing resilient systems that are prepared for possible future crises.[3] Accordingly, there is a need to rethink the purpose, content and modes of delivery of education and to make adjustments that in the future strengthen multiple flexible learning pathways (including mixed and distance education modes), introduce innovative pedagogical models, and incorporate crisis-sensitive planning.[3]

Based on the lessons learnt from this pandemic, policies, plans and strategies have to be developed to build more relevant and equitable education systems that are adaptable and able to withstand any resurgence of the pandemic or other future crises. In view of the existing situation, this study was initiated to assess community accordance to the essential actions at school level and support for reopening in covid era and factors responsible for it.

Methodology

Study design and duration: Community based cross sectional study was conducted for a period of six months June-December 2021, after obtaining due permission from institutional ethical committee. **Study area:** Field practice area attached to urban health training centre of department of community medicine.

Study population: The study population consists of parents/guardians/care takers of school going children aged 5-15years.

Inclusion criteria: Parents/Caretakers/ Guardians having one or more than one child aged 5-15years. Residing in the study area for more than one year.

Exclusion criteria: Parents/guardians/caretakers of children studying in class X and class XII.

Sample size: The population of children aged 5-15 years (%) as per National family Health Survey (NFHS-5) 2019-20 is 22.4% (Karnataka factsheet).[6]Based on the formula $4pq/L^2$, where 'p' is the population of age 5-15 years (%), q=100-p (77.6) and L relative precision 15%. The sample size was estimated to be 615 at 5% alpha error.

Sampling Procedure: A house to house survey was conducted in New Rehmat Nagar, which is an urban field practice area of department of Community Medicine. In each house, one eligible individual was enrolled in the study and the eldest of them satisfying the inclusion and exclusion criteria of the study was given priority and included, so as to avoid duplication of data. All the houses were surveyed till the required sample size was achieved.

Study instrument: The proforma consisted of two parts. Part I included the sociodemographic details and Part II comprised the Actions at school level recommended by World Health Organization

(WHO).[7] The responses to acceptance of 21actions at school level and support to reopening were rated on a 3-point Likert scale as follows: 2= "Agree," 1=Disagree, 0= "Neutral." The total score was calculated by adding the scores obtained on all the 21 items. A score ≥11 would be considered as good acceptance and support to reopening of schools and anything less than it as poor acceptance of the actions undertaken at school level for supporting reopening of schools.

Data collection: Approximately 1903 families were residing in the selected study area, systematic random sampling was applied, and every 3rd house was considered for data collection to meet the required sample size. Data collection was done through face to face interview after taking informed consent. The questionnaire was administered ensuring COVID-19 protocols so as to avert transmission of any infection through exchange of material (paper) and matter during COVID times.

Statistical analysis: Microsoft excel was used for data compiling and descriptive statistics (frequencies and percentages) along with chi-square test for association of factors.

Results

A total of 615 enrolled for the study. 44.44% of the study participants accepted the actions at school level and were affirmative for reopening of the schools. Table 1_illustrates sociodemographic details of the study participants, majority of nearly 60% were in the age group of 32–45 years, 63.25% were literates and maximum were females who were interviewed in the study. The study participants belonged to upper middle class and middle class socioeconomic status [(SES), Modified B.G. Prasad's Classification 2019 – India[8]

Table 2 depicts responses of the study participants to actions at school level as per WHO recommendations.[7]72.03% agreed that school administration had to re-assess and plan for additional staff required to implement adapted teaching methods. 45.68% were in favour of schools revising personnel and attendance policies, >50% accepted promotion of wearing of masks among students, teachers and school staff. 66.34% strongly accepted daily checks to ensure compliance with measures and raise awareness among staff and students of the importance of self-reporting any symptoms (60%) along with 55.61% of them agreeing for school health staff to keep a record of students health status and development. 45.04% were in favour of school administration to provide training and learning materials/ Platforms for school staff and teachers to deliver (culturally sensitive and age-appropriate) messages, activities and lessons to prevent and Control disease outbreaks in schools. Many study participants were not in favour of attending regular pedagogical sessions and training sessions regarding guidance on protection measures through communication materials such as notes, posters, and flyers.

Table 3 shows association of sociodemographic profile with acceptance to actions at school level (n=615) as per WHO recommendations.[7] Significant associations were observed with younger age ($p<0.0001$), study participants residing in nuclear families were more in favour of accepting the school actions and willing to send the children back to school. ($P < 0.0001$). Caretakers of children in Government school had poor acceptance in comparison to private institutions ($p<0.00001$). Other factors though not statistically significant but had an impact on acceptance were education of both parents, working mothers and siblings attending the same school.

Table 1: Sociodemographic Profile of the Study Participants (n=615)

Variables	Number	Percentage
Age in years		
18-24	106	17.24
25-31	129	20.98
32-38	195	31.71
39-45	185	30.08

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Education		
Liberates	389	63.25
Illiterates	226	36.75
Type of Family		
Nuclear	311	50.57
Joint/three generation	304	49.43
Occupation*		
Skill level I	233	37.89
Skill level II	154	25.04
Skill level III	139	22.60
Skill level IV	89	14.47
Socioeconomic Status**		
I	214	34.80
II+III	232	37.72
IV+V	169	27.48

**International Standard Classification of Occupations.*[9] ***Modified B G Prasad classification-2020.*[8]

Table 2: Responses of the Study Participants to Actions at School Level (n=615).

Sl.no	Actions at School Level[7]	Agree		Neutral		Disagree	
		No.	%	No.	%	No.	%
1	Set up a school support team (SST) appropriate to local context	108	17.56	332	53.98	175	28.46
2	Schools should revise personnel and attendance policies	281	45.69	196	31.87	138	22.44
3	Mandatory to implement physical distancing in and outside classrooms	188	30.57	215	34.96	212	34.47
4	Promote adherence to hand hygiene and respiratory etiquette	136	22.11	381	61.95	98	15.93
5	Promote the wearing of masks among students, teachers and school staff	332	53.98	52	8.46	231	37.56
6	School administrators and teachers to ensure adequate ventilation, using natural ventilation in classrooms, canteens and other rooms.	202	32.85	83	13.50	330	53.66
7	Guidance on protection measures through communication materials such as notes, posters, and flyers.	82	13.33	194	31.54	339	55.12
8	Reorganize the school layout for protective measures	133	21.63	265	43.09	217	35.28
9	Ensure adequate and sufficient supplies of soap, hand sanitizer and masks and to avoid potential stock outs	169	27.48	144	23.41	302	49.11
10	Daily checks to ensure compliance with measures	408	66.34	179	29.11	28	4.55
11	Conduct regular health education and pedagogical Sessions to promote healthy and protective behaviors	218	35.45	81	13.17	316	51.38
12	School administration to engage with students, parents and staff to ensure acceptance of the school's protective measures,	141	22.93	281	45.69	193	31.38

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13	Raise awareness among staff and students of the importance of self-reporting any symptoms	366	59.51	91	14.80	158	25.69
14	Sick leave policies to be revised accordingly.	111	18.05	286	46.50	218	35.45
15	School health staff to keep a record of students health status and development	342	55.61	170	27.64	103	16.75
16	Disseminate information on hygiene and cleaning protocols to school staff and students	244	39.67	312	50.73	59	9.59
17	School administration to re-assess and plan for additional staff required to implement adapted teaching methods (e.g. Smaller groups, shifts)	443	72.03	64	10.41	108	17.56
18	School administration, teachers, students, parents/ caregivers to identify measures for the continuation of school feeding and school-based Health services	378	61.46	219	35.61	18	2.93
19	School administration to inform and update students, staff and parents about current measures adapted to the evolving situation	198	32.20	256	41.63	161	26.18
20	School administration to set up training sessions on distance learning, safety and cleaning, and disease outbreak prevention, preparedness and response measures	149	24.23	207	33.66	289	42.11
21	School administration to provide training and learning materials/ Platforms for school staff and teachers to deliver (culturally sensitive And age-appropriate) messages, activities and lessons to prevent and Control disease outbreaks in schools	277	45.04	122	19.84	215	35.12

Table 3: Association of Actions at School Level in relation to sociodemographic profile of study participants. (n=615)

WHO Actions at School Level[7]					
Variables	**Good acceptance (n=261, 42.44%)**		**Poor acceptance (n=354, 57.66%)**		**Test of Significance**
Age in Years					
18-24 (106)	73	27.97%	33	9.32%	$\chi2$ =112.3788 p<0.0001 *Significant
25-31 (129)	88	33.72%	41	11.58%	
32-38 (195)	39	14.94%	156	44.07%	
39-45 (185)	61	23.37%	124	35.03%	
Type of Family					
Nuclear (311)	182	69.73%	129	36.44%	$\chi2$ =66.6104 p<0.0001 *Significant
Joint/Three Generation (304)	79	30.27%	225	63.56%	
Socioeconomic status**					
I (214)	86	32.95%	128	36.16%	$\chi2$ =5.9774 p=0.5034 Not significant
II+III (232)	90	34.48%	142	40.11%	
IV+V (169)	85	32.57%	84	23.73%	
School enrolled					

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Private (245)	143	54.79%	102	28.81%	$\chi 2$ =42.2947 p<0.00001 *Significant
Government (370)	118	45.21%	252	71.19%	
School stages to which child belongs					
Pre School (172)	23	8.81%	149	42.09%	$\chi 2$ =141.9962 p<0.0001 *Significant
Primary (158)	55	21.07%	103	29.10%	
Preparatory (168)	88	33.72%	80	22.60%	
Middle stage (117)	95	36.40%	22	6.21%	

*p<0.05

**Modified B G Prasad classification-2020[8]

Discussion

School children being an integral part would require extra efforts in helping them face the pandemic. In the present study, it was found that the 44.44% of the study had good acceptance for actions at school level and were in favour of school reopening.

In a research done by Dheeraj Sharma and Poonam Joshi, in Muzaffarnagar, Uttar Pradesh[4], in 2021 concluded that situation for schools is also worrisome, as their revenue has decreased markedly. only 11% of parents were in support of sending their children back to school during the pandemic. Around 16 000 parents were willing to wait until there are no cases in their area, or vaccine had become widely available, or were unsure. In comparison to our study where in 42.44% agrees on to actions taken at school level by the authorities and were willing to send their children back to school quoting their own terms and conditions.

In a study done in England by Keeling et al[2]., in 2021 concluded that school reopening would result in increased mixing and infection amongst children and the wider population, reopening schools alone in June 2020 was unlikely to push R above one. In our study there were mixed responses for reopening of schools. Ultimately, reopening decisions are a difficult trade-off between epidemiological consequences and the emotional, educational and developmental needs of children.

A study by Alfonso Landeros et al[5]., Los Angeles, United States of America in 2021, analysis identified child-adult transmission as a potential risk to reopening schools even under the plausible assumption of weak child-child transmission relative to adult-adult transmission. During a 6-month time span, reopening schools in a population with 0.1% infections with 2 cohorts avoids triggering a prevalence closure decision rule based on a 5% pediatric infection threshold. Apparently in our study sending children back to school was dependent on factors like residing in nuclear families, siblings attending same school, working parents and so on.

Conclusion

The study was a focussed on the acceptance of actions at school level and imminent opening of schools, reluctance was observes among the study population to support school reopening. Apparently, there is a need to revaluate purpose, content and modes of delivery of education and to make adjustments that in the future strengthen multiple flexible learning pathways (including mixed and distance education modes), introduce innovative pedagogical models, and incorporate crisis-sensitive planning. Based on the lessons learnt from this pandemic, it is recommended that policies, plans and strategies be developed to address pre-existing gaps and challenges and to build more pertinent and equitable education systems that are resilient and able to withstand any resurgence of the pandemic or other future crises.

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