

Chapter 15

Preparing Children for Pandemics



Rakhi Saxena and Shailendra K. Saxena 

Abstract COVID-19 has given us a food for thought that whether we are prepared for such pandemics or not. Developed nations may say that they have enough resources to tackle such situations, but when it comes to the physical and emotional security of the children, even they have to think manifolds because preparing children for such pandemics need lot of effort and apt planning. The purpose of this chapter is to reflect issues related to children during any infectious disease outbreak like COVID-19. Adults are mature enough to control their emotions and can act patiently, but immature minds are always perplexed and act in a very clingy way when some adverse situation is thrown to them. Children are ardent observers and act according to the reactions of the folks around them. It is difficult for them to conceal their behavior, and it is difficult for parents as well to manage their anxiety levels. During crisis period when social distancing and refrained outdoor activities have brought our children into a knotty situation, it is necessary that we understand their fears and myths, try to resolve their concerns in a polite way and strengthen their minds. At this stage the role of parents, teachers, educational institutes, social media, and international children's organizations need to be redefined. The importance of the decisions taken by the governing bodies should be explained to the children in an effective way, so that they do not panic and reflect a brave attitude. UNICEF in collaboration with international health support systems and departments has a major role to play. Appropriate planning for preparing the children for pandemics has to be incorporated in our system, so that any future crisis can be dealt in an easier way. Schools colleges and other educational institutes should

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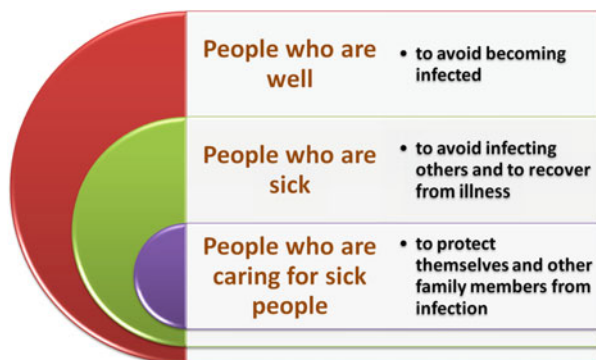
execute immunization and hygiene and health practices in advance to promote prevention.

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15.1 Introduction

Life seems to give lots of lessons to us every moment, but we fail to comprehend unless we face a catastrophe and till we try to understand the laws of nature, it is already too late. The current situation of the world is no less than a world war which has put everyone in a skeptical situation especially dealing with young and blank minds. The coronavirus disease 2019 (COVID-19) pandemic has created anxieties, turbulence, and fears in the young minds, and they barrage their parents with heaps of questions. COVID-19 has caused a global concern for Public Health Emergency. However, still the ongoing debate on the emergence of virus and its immediate host has proved its homology with bat coronavirus isolate RaTG13 (Li et al. 2020). It is responsible for the social and economic losses worldwide and is being transmitted at a very rapid pace. Health experts are still sailing in turbulent ocean to find an effective drug or vaccine. COVID-19-infected children may be asymptomatic or may present clinical symptoms such as fever, runny nose, dry cough, and fatigue including upper respiratory symptoms, congestion (Hong et al. 2020). Clinical reports also suggest poor immune response of the patients and are still trying to unveil the virus and its menaces (Weiss and Murdoch 2020). Along with the elderly population who are considered to be at the greater risk, even young children are not spared by the virus. According to the journal *Pediatrics*, nearly 2143 cases were reported in which 90% of children reported mild or moderate symptoms and were found to be at lower risk. But 6% of children showed intense and acute symptoms although none of the children died (Dong et al. 2020). Now the main concern was how to tackle the children and teach them to isolate themselves. Figure 15.1 explains the three categories of people and their role for not letting the infection escalate.

Fig. 15.1 Categories of people and how they can mitigate the infection of COVID-19



Children need to understand the above fact given in the figure more deeply because they usually love to be at crowded places such as schools, parks, etc. and love to play with their friends, so they have more chances to capture the infection and act as major disease transmitters and can intensify the pandemic. Due to lack of knowledge, the lockdown situations or imposing self-isolation on them by their parents may feel like a burden and is making them both apprehensive and restless. Either they are taking it just a vacation which can be enjoyed by numerous ways or they are in a dilemma about the repercussions of not following the rules. Children are always experimenting and believe only when the facts are presented in front of them in a way that they understand the meaning and necessity of refraining themselves from activities which can be the cause of concern.

The studies reveal that the children are equally susceptible to infection as the elderly people. Many other factors that increase their susceptibility include poverty, malnutrition, unawareness, and special healthcare needs, so the following topics will give us deeper insight into the children's perspective and the role of the people around them to combat the situation which may crop up due to this pandemic (Vaughan and Tinker 2009).

15.2 Fears and Myths in Children

Fears or anxieties are the usual part of the normal development of the child (Gullone 2000). But the myths and the pessimistic information surfacing around the children during the critical situations like COVID-19 pandemic may inoculate those fears in children which become a major health concern (Kessler et al. 2005). The way the parents transfer the information to the children about the pandemic is highly responsible for the fear levels of the children apart from the information received from media, pals, school and other community members, or direct encounter with the infection (Remmerswaal and Muris 2011). The haunting thoughts that may probably capture kids' minds right now are depicted in Fig. 15.2.

Fig. 15.2 The burning questions in the mind of children. These are the flickering questions in the minds of our kids due to the fear of pandemic



Away from their school, daycares, or routine outings, children are feeling helpless and discomfort for they do not have an idea that when would this mayhem be over and when they will return to normal days. Sans playgrounds and friends, they are in a state of frustration. For older kids it is quite easy because they have the maturity level to understand and level their anxieties. But the younger ones have lots of questions as to: Why so much of hand washing is required? what will happen if they get sick? when will they met their friends? and so on.

15.3 Children's Perspective

Children are keen observers; they can easily understand the agony, fear, and anxiety in their parents, peers, and community people (Liu 2020). Their perspective about the pandemic situation depends upon the behavior of the people around them. Hearing from social media, family discussions, and alarming news may make them more stressful, anxious, clingy, or uncertain in terms of their attitude. Schools being shut down, promotion of social distancing and parents working at home make them little apprehensive about the situation. Often children of lower age group are perplexed in such critical situations that why their parents have to work instead of playing with them or why they cannot play outside with their friends, etc.

15.4 Engaging Children for Pandemic Preparedness

When children are stressed, their bodies respond in a different way like by screaming, hiding, becoming sad, etc. To help them cope with these responses, it is important to acknowledge their feelings and involve them in different activities like:

- Reading books
- Engaging in arts and craft
- Helping parents in daily chores
- Exercise and Yoga to remain fit
- Meditation and spiritual talks to remain emotionally balanced
- Praying
- Practicing mindfulness
- Gardening to remain close to nature
- Searching online learning options
- Socializing on phone
- Writing stories and poems
- Playing indoor games with family members
- Listening stories from grandparents, etc.

Although pandemic phase is difficult to manage because we are throughout in a state of dilemma whether we will be safe survivors or not yet we have to tackle the



Fig. 15.3 A child's imagination and reflection about the novel coronavirus 2019. It shows that children are keen to know about the virus and are ready to face it. (©Picture courtesy: Aditi Saxena, Sixth Standard)

situation by our positive approach, so that our children should strengthen themselves. We can ask the children especially of lower age group to give their input by depicting their knowledge about the virus by writing stories and poems or by drawing posters, cartoons demonstrating their courage to fight the demon coronavirus as shown in Fig. 15.3. In addition, it is essential that families are not short of their basic needs (e.g., food, shelter, and clothing) otherwise instead of dealing with their children's stress, they will themselves be worrying about their inefficiency to provide proper nutrition and safety to their children.

15.5 Behavioral Management of Children (Prevention)

As per the information circulating through the media, the risk of exposure to COVID-19 is low in children as compared to adults. Immature children with less understanding of the situation are more susceptible to behavioral changes that disrupt their daily lives. Therefore, supporting them and protecting their behavior is necessary by people close to them not only during pandemics but also post pandemic. Children watch and interpret on their own and are easily carried away by the reactions of their parents, peers, and other community members, so we have to learn to guard our behavior first in order to prevent turbulence in budding minds.

15.6 Planning for School Closure

Community mitigation has been proved to be a good method to control disease spread. According to the report of CDC, some parts of the world have already experienced the 1918 influenza pandemic (Centers for Disease Control and Prevention n.d.). Previous experiences suggest that certain initiatives like closure of schools along with other precautions may help control the spread of pandemic in children.

Other mitigation planning such as avoiding large gatherings, minimizing or completely avoiding social gatherings or cancelling large events, and social distancing will prevent the spread of disease (Thorp 2020).

Disasters do not knock the doors before they come, they are unvoiced and walk into our lives without giving us time for preparation, so we should always be organized and ready for situations like school closures or complete lockdown. To limit the conduction of SARS-CoV-2 or any other health crisis, it is strictly required segregating the students and the teachers.

Advance and special planning for schools and training sessions can be conducted by health departments to implement effective measures, sanitation, and disease control guidelines (Stevenson et al. 2009). Imparting knowledge about health policies and programmers should be the part of school activities to promote prevention and control of bacterial or viral infections rather than only limited emphasis on immunization (Brener et al. 2007). These can also be reflected on school's portal throughout. However, many school days are lost due to shutting down of schools, but by effective planning, students can remain connected to their schools through Webinars, Google classrooms, etc. (Hardy 1991). Just smart planning and execution can overcome many problems.

15.7 Role of Teachers

It is the responsibility of the teachers to keep their students updated with the facts and attend to their queries in a calm and polite way. The fears and anxieties of the children can be reduced by providing scientific facts and sharing accurate information about COVID-19. It is not an easy task to make children understand the acuteness of the pandemic so easily. They can learn best when correct sequence of knowledge is imparted to them. Figure 15.4 shows the different levels of the methods which a teacher can adopt to make the children of lower age group realize easily who are difficult to be tackled under such pandemic situations.

Based on reputable sources such as UNICEF and the World Health Organization, the preschool children should be engaged in some activities to make them understand the protocols of their safety during any pandemic like hand washing, social distancing, avoiding handshakes, using handkerchief during cough and sneeze, etc. (Fisher and Wilder-Smith 2020). The secondary school children can be asked to form their own groups and portals to increase the awareness among their peers, families, and other community members through posters public demonstrations, discussions to encourage them to express and communicate their feelings.

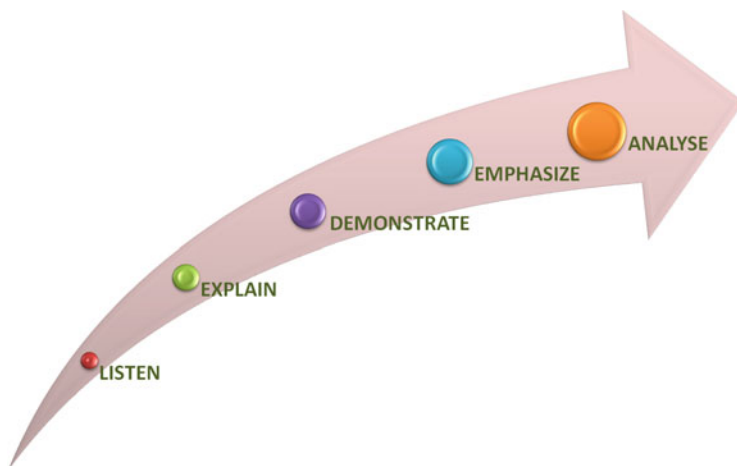


Fig. 15.4 Teaching levels for effective learning. A concerned teacher can use these techniques to unfold the fears and mysteries of immature learners

15.8 Role of Educational Institutes/Schools

Closing down of schools does not mean that their role is finished during any pandemic situation. Instead schools act as the major source to impart vital training to students and their families to help them understand the repercussions of violating the norms laid down by the government and health facilitators. School leaders, teachers, and support staff can focus on the well-being of students and prepare for the continuity of education, including working on online and remote learning options. Creating online classes and sharing and promoting e-learning can help students overcome the interruption in their academics (Rzymiski and Nowicki 2020).

15.9 Role of Educational Policy Makers

About 80% of pupil population of the globe are affected by the closure of educational institutes due to the COVID-19 pandemic. Some of the students are deprived of the regular education for months which is being recognized as a major challenge by the governments and education policy makers. UNESCO is persistently observing and holding webinars, implicit meetings, and discussions with the educationists and the policy makers globally to meet out the challenges in education.

To diminish the interruption in studies during pandemics, many countries are implementing various forms of strategies, including Internet and distance learning, and are well prepared to impart education during any crisis (Wang et al. 2020).

Education policy makers can plan out in advance taking examples from early outbreaks like Ebola, SARS, and now COVID-19. For the continuation of education, some measures taken by the important educational organizations of the world may include:

- (a) Worldwide collaboration to enable learning
- (b) Sharing of educational resources
- (c) Exchange of novel ideas and virtual education tools
- (d) Teacher training to enhance e-learning and teaching skills
- (e) Using distance learning
- (f) Free access to educational sites
- (g) Adapting existing educational sites for use in Smartphone
- (h) Dealing with telecom companies to eliminate the cost of accessing material from a Ministry of Education site.

15.10 Role of a Parent

Most of the parents find no other option than to trust their doctors, nurses, government, and child care centers during any pandemic (King et al. 2018). The preparedness of a parent to deal with the children's anxiety depends on authenticity of the information they get.

During the COVID pandemic, distress felt by children of any age group is certainly due to school closure, distancing with friends, and sports, and the anxiety levels of the children can be diminished by extra love and care. While talking to the children, it is important that we should tell the truth to the children that if they follow the proper guidelines they will be alright instead of maximizing their fears just to make them sit quietly. It becomes necessary as a parent to rub off their fears and prevent creating a difficult scenario (Rich 2020). For this we need to understand the *state of mind* of the children as they may have:

1. Limited or no information or even misinformation
2. Fear and panic about the current pandemic
3. Stress and frustrated with their parents expressions and reactions
4. The advices for parents facing the wrath of their children include:
 - (a) Control of their anxiety levels first.
 - (b) Do not panic in the presence of children around the topic as our conduct cause ripples in their minds.
 - (c) Introspection of self-mental status before facing the children.
 - (d) Keep your fear, aggravation, and apprehension aside and prepare yourself for a fact-based conversation.
 - (e) Try to find out what our children know about the virus and what are their misconceptions.
 - (f) Lend your ears patiently before giving any suggestions or falling in any arguments.

- (g) Then discuss about basic guidelines of prevention.
- (h) Never load your child with your worries and future concerns.
- (i) Tell them about the meaning and necessity of lockdown and self-isolation.
- (j) Reassure your child that the concerned people are working round the clock and leaving no stone unturned to control the situation.
- (k) Tell them that we can also support in bringing down the pandemic by playing our role wisely like distancing ourselves socially, maintaining routine hygiene and cleanliness, limiting travels, taking a balanced diet to avoid any other health issues, and take care of physical as well as mental well-being.
- (l) Avoid watching or reading information causing panic and stress.
- (m) Playing games, reading story books painting together, and doing household chores together can be followed.
- (n) Making children sit and study is really a tough job. Let us make them learn and earn.
- (o) We can give them a chance to earn money to buy their favorite toy or gadget in future by making them do what we want them to.
- (p) We have to try our best to keep them busy, so that they remain calm and engaged during the pandemic to distress them and also provide them useful factual information to remain safe without anxiety.
- (q) We have to explain our kids that COVID virus is very arrogant and egoistic; hence, it will not come to your house unless and until you go out to bring it home.

15.11 Dealing with Stress and Depression in Children During Pandemic Like Emergencies

COVID-19 has put the world's medical community to cooperate combat the virus. The countries as well as the global institutions need to put their hands together to help each other for the securing world peace and prosperity (UNESCO 2020).

To deal with the stress among children, various programmers need to be organized with the involvement of youth to understand their perspective and behavioral aspect to deal and confront future pandemics. Constructing a panel of different category of folks who can look into every aspect of the child imaginations and perspectives can effectively give wider solutions to for pandemic planning (Koller et al. 2010). This panel of intellectuals may include:

- Young volunteers
- Child psychologists
- Social reformers
- Counselors
- Educationists
- Medical representatives

We have to remember that together we can and will come out of any adverse situation.

15.12 Ensuring Mental Well-Being and Spiritual Upbringing

Mental well-being is also a part of other healthcare system especially during pandemics. Meditation, group prayers, reading spiritual and motivational stories, and singing spiritual or motivational songs can help out to release stress. The novel aspect of technology such as television, the Internet, and smartphone can also play an important role in delivering face to face support and training required during critical situations (Reisman et al. 2006). TED talks and spiritual lectures should be broadcast on regular basis to provide moral support.

State and local health departments should put their best foot forward to ensure that through media they arrange shows on mindfulness, talks with experts, and religious representative to uplift the mental status of children as well as adults. Social workers, child psychologists, psychiatrists, school psychologists, family counselors and therapists, and community organizations should collaborate to ensure mental health services.

15.13 Conclusions

Our understanding with the ongoing COVID-19 disaster shows that although children are at lower risk still mental trauma of the children should be dealt in a very effective way to strengthen them emotionally. Global organizations need to focus more on issues related to children by effective planning and should endorse necessary measures.

Right from the grassroot level involving home, community, local bodies, and national and international organizations all have to combat the pandemic jointly as we all have only one future our “children.” We cannot afford to wait further for any adverse situation to formulate new guidelines. Whatever the earlier pandemics have taught us, we have to act according to that only. Disaster management bodies are doing their job round the clock. We have to ensure our children that they have to evolve as fighters in any disaster and come out as winners.

15.14 Future Perspectives

Hand on experience with disease outbreaks and pandemics opens the new conversation between policy makers, educationists, health administrators, law makers, social workers, and many more to look into the virtual pandemic which may be thrown by nature on humanity. How to deal with it in future is a major concern. Immunization policies at schools and colleges, health advisories to be laid down and followed, and immunization requirements need to be framed and prepared in advance. Few studies systematically investigate the range of factors that discuss the medical policies, facilitators, and obstacles in their implementation (Fawole et al. 2019).

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