

COVID-19 – Protecting Children’s Psychological Health

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Abstract

Since the beginning of 2020, the world has started talking about the deadly Coronavirus disease (COVID19); a novel coronavirus causing pneumonia and death - originated in Wuhan, Hubei province in China in December 2019 which has rapidly spread all over the world. WHO has declared COVID19 as a pandemic in March 2020. According to current statistics, 20,697,718 people have been confirmed to have Covid-19, leading to a total of 749,594 losing their lives. Countries have been struggling to contain the spread of the disease forcing many to impose complete lockdown and restrictions. Leading to a huge socio-economic impact all over the world. With all the economic and educational activities to halt, COVID19 may spread its ill-effects on the mental health of people as well. Although children seem to be immune to the disease so far, for possible reasons discussed further in this article. They are the most vulnerable group to be affected mentally, as they are not getting adequate physical and mental stimulation which the school and other co-curricular activities would otherwise provide. The consequences of global lockdown, change in routine, and not socializing can result in increased anxiety and stress levels leading to a broad range of other mental and behavioral issues, which can have a lasting effect on children and could be worse in children with existing mental and other learning difficulties. Quarantine or Isolation is unavoidable in pandemic and separation from loved ones and boredom can cause irreparable damage to mental well-being. It is therefore essential for parents to provide the right guidance and knowledge to children; provide a listening ear and be sympathetic to their questions; keep them busy with various activities, exercise or walk (where allowed!) which would avoid a lot of anxiety – keeping them both physically and mentally healthy.

Keywords: Coronavirus Disease, Quarantine, Vulnerable Children, Stress, Anxiety, Psychological Health, Radicalisation

1. INTRODUCTION

Since March 2020, the entire world has shifted its attention to various measures to contain the transmission and minimize the effect of this new disease on both its people and the economy. The TV, media, and social media is dominated by this outbreak, with a lot of information about the pandemic. This places children at risk of being exposed to a huge amount of information; combined with the fact that children are also being subjected to a lot of change in their usual routines – school closures, lack of activities, and socializing could lead to a lot of anxiety and stress. Being a mum to a 4- year- old & 10-year-old, it is understandable that parents tend to be very protective about their children and avoid any conversations which would leave them

distressed. Parents are unsure about how to talk to their children and how much information to share. Covid-19, a coronavirus which causes Severe acute respiratory syndrome began in Wuhan, Hubei province, China at the end of 2019; eventually with its global spread WHO declared it as a pandemic in March 2020¹. However, Coronaviruses are not new to us, they are a group of viruses that cause upper respiratory tract infections, which are usually mild. Covid-19 the novel coronavirus has symptoms very similar to the flu to start with - adults start with a fever, dry cough in mild cases, however, it leads to acute respiratory distress leading to a multi-organ failure and death in those who are severely affected & those in vulnerable groups with

underlying conditions. According to the Centers for Disease Control and Prevention, the symptoms of Covid-19 are similar in both adults and children. However, the data from china⁵ shows less number of infants and children in their statistics, although infants and young children often require hospital admission after a respiratory tract infection such as the influenza virus; the fact that there is a limited number of pediatric cases of Covid-19 has surprised the epidemiologists around the world. Confirmed cases in children have so far shown mild symptoms – fever, runny nose, cough, vomiting & diarrhea. As of today, it is not known whether children with underlying conditions have a higher risk of severe disease. Because this is a novel virus there is still a lot to learn about its impact on children.

2. CLINICAL PRESENTATION

The main manifestation of Covid-19 includes high temperature and a dry cough, characterized by lymphocytopenia and ground-glass opacities on chest CT. There has been a lot of research on covid19 since December 2019. The recent addition is Olfactory dysfunction or anosmia. Although severe infection patients can develop acute neurological manifestations – cerebrovascular disease, skeletal muscle injury, and impaired consciousness. Some patients may experience sore throat, nasal congestion, and other upper respiratory symptoms such as olfactory dysfunction. Olfactory dysfunction which includes both anosmia (loss of smell) and hyposmia (reduced sense of smell) seem to be particularly prominent among Covid-19 patients^{34 36}. There may be other accompanying symptoms such as diarrhea, vomiting, and muscle pain. However, patients with multiple comorbidities are prone to severe forms of the disease.

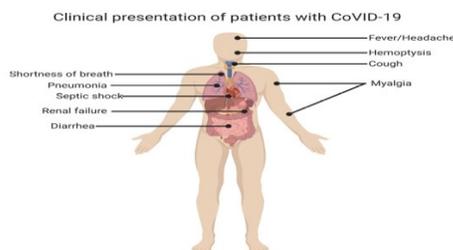


Figure 1. Clinical presentation of Covid-19
Contributed by Rohan Bir Singh, MD²⁷

3. PATHOPHYSIOLOGY

Some studies have stated that the pathophysiology of Covid19 is very similar to that of severe pneumonia caused by other bacteria and viruses. There is over-production of the inflammatory cytokines, resulting in a cytokine storm, leading to multiorgan failure & therefore death. G.Umberto Meduri et al. concluded that an unfavorable outcome in acute respiratory distress syndrome is associated with an exaggerated inflammatory response unrelenting over time.

4. COVID-19 AND THE NASAL CAVITY

A review of literature from different databases summarized the mechanisms of the occurrence of olfactory dysfunction (loss of smell) and the coping strategies.

Covid19 uses the S1 - spike protein which adheres the virion to the cell membrane by interacting with the ACE2 receptors of the host. ACE2 – a functional receptor for covid19, its expression, and distribution in the CNS can cause neurological manifestations. The anatomy of the olfactory system also acts as a contributing factor to the infection of the central nervous system via the cribriform plate^{39,40}.

There is a lot of evidence that confirms the nasal cavity is a vital area and highly susceptible to covid19 infection. Some studies showed that viral load was higher in the nasal cavity in both symptomatic and asymptomatic patients – which proved that the nasal cavity as the gateway for the initial infection⁴¹.

Covid19 has also been detected in patients tears which could cause infection via the nasolacrimal duct^{42, 43}

5. LOSS OF SMELL

In May 2020 loss of smell or anosmia was recognized as one of the symptoms of the novel coronavirus Covid19 by the WHO³⁷. Research³⁵ shows that:

- 50% of the patients may have anosmia (loss of smell) – patients then should self-isolate

- 90% of the patients who lose the sense of smell may see an improvement in their sense of smell in 4 weeks
- Most patients with loss of smell do not need further treatment – however, Covid19 test should be conducted if possible
- About 42% of the patients are more likely to experience a loss of taste as well along with loss of smell. There is a lack of evidence onto what extent both co-exist

What to do when there is a loss of smell?

- Promptly self-isolate and get Covid19 testing. If the tests positive follow the guidelines issued by the government
- If the test comes negative, many other conditions cause loss of smell such as allergic rhinitis or common cold and it should get better soon
- It is reported that loss of smell is sudden and severe in most cases however it is transient and happens over a while in some. Hence it is advisable to test for covid19 infection with a PCT if symptoms are present or in any patients with a sudden loss of smell with no other obvious causes (common cold or obstruction in the nasal cavity)
- While most patients have other symptoms about 16% of patients have shown to have a loss of smell as an isolated symptom³⁸
- If loss of smell persists for over 4-6 weeks in those who are covid19 negative and there are no other causes and beyond 3 months for patients who are positive to Covid19 require an assessment from ENT specialist

6. TRANSMISSION AND SPREAD

There are currently very few studies that define the pathophysiology of Covid-19. There is huge uncertainty over the mechanism of the spread of the virus; most of the characteristics are derived from similar coronaviruses that spread from one human to another through respiratory droplets. Normally with coronaviruses, patients are contagious only when the patient is symptomatic. However, in the case of Covid-19, there has been

emerging evidence that suggests that transmission might be occurring even during the asymptomatic phase or incubation phase of the disease, which is said to be 2 and 10 days²⁰²¹. According to Marco Cascella et al. initial cases of Covid-19 were linked to animal-to-human transmission at the Seafood Wholesale market in Wuhan, China, which is believed to be the main mechanism of transmission.

However, the later cases were not linked to the exposure to the market, thus proving the virus could be transmitted from human-to-human; the paper concluded that Covid-19 could be transmitted from human-to-human, therefore symptomatic patients are often a source of infection.

However, it was also concluded that the possibility of spread from asymptomatic patients could not be excluded. There have been cases wherein individuals remain asymptomatic and yet transmit the virus. This data suggests Isolation is currently the only way to contain this pandemic.

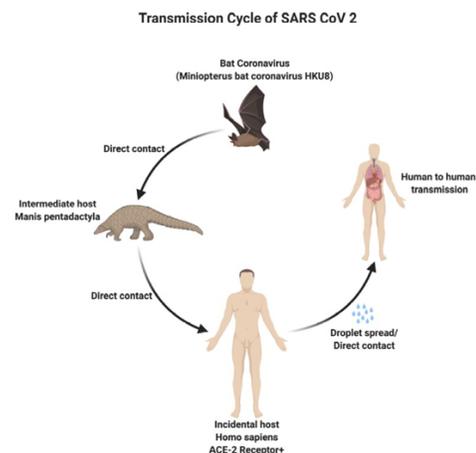


Figure 2. The transmission cycle of SARS CoV 2

7. PREVENTION OF COVID-19

Since the outbreak has emerged and declared a pandemic, various countries have taken measures to reduce the surge in the number of cases that would cripple the healthcare system. The WHO and the US centers for disease control have issued advice and recommendations to prevent the spread of Covid-19. It is recommended to avoid

travel to high-risk countries; avoid contact with infected individuals and avoid the consumption of meat from the regions with the Covid-19 outbreak. Most of the countries have largely opted for quarantining the population with limited human contact to control the spread. There has been a particular emphasis on various hand hygiene measures, along with the use of personal protective equipment (PPE) such as masks.

8. EVIDENCE OF VITAMIN D IN PREVENTION OF COVID-19

There is a lot of evidence that Vitamin D plays an important role in the immune system, other than the regulation calcium homeostasis and bone mineralisation¹⁸ It has been found that Vitamin D regulates the macrophages response, therefore, preventing them from releasing too many inflammatory cytokines; concluding vitamin D has a significant impact in the expression of ACE2 generation. As discussed previously ACE2 is associated with better outcomes for coronaviruses and they protect the lungs against acute injury.

According to research¹⁷ data, vitamin D had proven to have significant protective effects. Studies have shown that people with Chronic Pulmonary disease benefit more from supplementation. A systematic review and meta-analysis of 25 randomized controlled trials with total participants of 11321 aged between 0-95 years showed that Vitamin D had an overall protective effect against acute respiratory tract infection; the benefit was greater participants who were supplemented daily or weekly; and added that public health measures to improve Vitamin D status in settings with Vitamin D deficiency is common must be implemented.

Although, the role of Vitamin D in the treatment and prevention of Covid19 requires further research; there would be no harm is prescribing Vitamin D for the deficient population.

9. EVIDENCE THAT QUARANTINE OR ISOLATION WORKS

Quarantine is the separation and decreasing the movement of people who could be exposed to a contagious disease to reduce the risk of

transmission to other people. However, isolation is a different term, which means the separation of people who have already been diagnosed with a contagious infection from those who are not sick.

Quarantining is used for centuries to control the transmission and spread of diseases⁸. The Bible has evidence for leprosy; In 1347 plague rapidly spread across the countries, reaching Europe by 1350. It is estimated that approximately 1/3rd of the population died in European countries, which led to the establishment of various infection control measures. For example, in Italy – every person with the plague was taken to the fields outside the city to either recover or die. Similar measures were used in Croatia, during the Black Death, a place was established outside the city to treat people. Although these measures were modestly effective which led the council to take more radical steps to prevent the disease⁹. In the 17th century, after the American Revolution, the threat of the spread of yellow fever led New York and Connecticut to make boards of health which was followed by several cities later on. The first series of the National Quarantine Conventions was called in 1857 in Philadelphia. This convention discussed prevention, quarantine at ports, and vaccination of migrants.

Although quarantine is backed by various governments around the world, scientific evidence to support this is lacking and quarantine is usually interpreted in multiple ways. Isolating is not a pleasant experience for anyone. The changes in everyday routine, lack of freedom; boredom can impact on physical and mental well-being⁷. Although, quarantine is hard; One should not forget that SARS – a transmissible severe acute respiratory syndrome was successfully contained in many countries using strict quarantining.

10. PSYCHOLOGICAL EFFECTS OF QUARANTINE AND ISOLATION

Quarantine is not a very pleasant experience; staying away from loved ones, lack of freedom can affect psychologically; suicides have been reported, anger is generated since the imposition of quarantine in previous outbreaks. A review of 24 papers across 10 countries; included people with SARS, H1N1, Middle East respiratory syndrome, and Equine influenza. Five

comparative studies were conducted among people quarantined with those not. A study that among the hospital staff who were exposed to SARS found that they were quarantined for 9 days; being quarantined was one of the symptoms of acute stress disorder those staff. Staff most likely reported exhaustion, insomnia, reduced concentration, lack of motivation of work, anxiety, and indecisiveness²⁴. A study conducted in China during the SARS epidemic concluded that the impact of being quarantined was a major factor for post-traumatic stress symptoms in hospital staff even after 3 years²⁵.

Mixed method research conducted, investigated the psychosocial response of children and their parents due to pandemics, specifically measured the traumatic stress; Surveys, focus groups, and interviews were used to collect data from 398 parents. The posttraumatic stress disorder reaction index was used to collect the data. 30% of isolated or quarantined children and 25% of the quarantined or isolated parents met the criteria for PTSD; indicating that measures such as quarantine and isolation can have significant effects on children and parents. The study concluded that specific response strategies should be met to ensure the behavioral and psychological health needs of children and their families²⁶. During the first equine influenza outbreak in Australia in 2008, many disease control measures were put into place to contain the disease; these measures included quarantining people in their properties. A survey conducted by Melanie et al. assessed the psycho-social impact of the disease and the psychological distress during the lockdown. Most studies reported a high prevalence of psychological stress, psychological symptoms, depression, low mood, insomnia, and post-traumatic symptoms. 34% of the people reported high psychological distress compared to 12% in Australia's general population; statistics of this survey indicated that certain groups were more prone to high distress, particularly young people and also those who have lower educational qualifications.

11. CHILDREN & COVID-19

There is some evidence that children exhibit mild symptoms with human coronavirus (HCoV). For example, a retrospective study between 2013-

2014 of children with Human Coronavirus by a reverse-transcriptase polymerase chain reaction in a community cohort and children's hospital showed that children with HCoV, in general, had mild symptoms demonstrated by few hospital admissions. However, hospitalized children <2 years of age, with any chronic complex conditions (with cardiovascular, neurological, or respiratory conditions) most likely required respiratory support. This study concluded that children from this particular community detected with human coronavirus were <5 years of age; children with HCoV detected received respiratory support along with admission to ICU. Children <2 years of age with chronic complex conditions were at risk of severe illness. A small retrospective study in China between December 2019 to Feb 2019 among 9 infants showed that HCoV can infect infants as well. However, none of these infants needed intensive care; 7 out of the 9 were female; the effect of Covid19 on infants is an area which requires further study¹⁰. The data from the center for disease control and prevention¹¹ in China showed that 0.9% of the total infections were among children aged 0-10 years and 1.2% were among 10-19 years. However, we still do not know what the future holds, the number of pediatric patients with Covid-19 could increase or disappear, we are yet to learn more about the novel coronavirus. During the Spanish flu pandemic in 1918, there was a high mortality rate among 15-24-year old's, 25-44-year old's, however, over 65 and children under the age of 15 years had little or no change to mortality rates compared to the previous flu season¹². During the H1N1 outbreak, there was a significant shift with disease distribution observed between the ages of 5-19 years compared to the previous year's flu¹³. However, it is worth to note several infectious diseases are known to be mild in children. For example, polio occurred more among adolescents (1 in 100) when compared to infants (1 in 1000)¹⁴. SARS had a 50% mortality among >65-year olds but had no mortality among children and adults <24 years old. There is no clear answer to the resistance among children to infectious diseases. Some explanations include children having an active innate immune response, healthy respiratory tracts because they are less exposed to smoke & pollution compared to adults; others suggest that

maturational changes in the axonal transport system – a difference in the distribution, maturation, and function of viral receptors could explain the resistance and the difference in incidence rates¹⁵.

A study in 2006 among male and female rats, found that ACE2 (Angiotensin-converting enzyme 2) was a functional receptor for SARS virus and was, therefore, was the target for interventions and treatment; it was found that ACE2 decreased in rats with age, although there were no gender-based differences; it showed that ACE2 in young, middle-aged groups; it was markedly higher in old female rats than male. This study concluded that ACE2 is significantly higher in young adults compared to older groups, therefore making them less prone to SARS¹⁶. This could explain a lower incidence rate and less mortality among the children; however, further research is required.

A systematic review of 45 scientific papers showed that only 1%-5% of the diagnosed Covid-19 cases were children; they seem to have a milder disease with extremely rare fatality and better prognosis when compared to adults²².

A Co-SPACE study among 10000 parents - by the University of Oxford shows that most parents & carers of children 4-10 years have reported an increase in their child's mental health difficulties such as – being sad, worried, and being clingy to the parent⁴⁹. Those with primary school-aged children have reported having seen an increased emotional behavior accompanied by restlessness and attention-seeking behavior. Parents of secondary school-age children have reported in their children having similar issues like the primary school children. Adolescents taking part in the survey report no change in their emotional behavior. However, parents/Carers of children with special needs, those with an existing mental health issue report a reduction in emotional difficulties and no change in behavioral difficulties. The parents also reported that the behavioral difficulties had gotten worse over time leading to temper tantrums; along with greater levels of restlessness and difficulty to concentrate.

As the world looks forward to getting back to normal and easing of lockdown restrictions. Most

of the countries around the world have opened up schools. The USA is one of the countries that is badly hit with coronavirus – has opened up its schools during June. According to an analysis by the American Academy of Pediatrics and the Children's Hospital Association which updates its figures weekly – there has been a 90% rise in the number of Covid-19 cases among children over that last month since the schools have reopened⁴⁴. According to the report by the American Academy of Pediatrics, there were about 179990 new covid19 infections among the children between July 9th and 6th of August, 2020. 380000 total cases have been reported as of August 6th, 2020. The report also suggests that severe symptoms are still rare among children. 0.5 to 5.3% of the children infected were hospitalized and 0% to 0.4% of all Covid death^{44, 45}.

Recent studies have indicated that although covid-19 does not pose a huge risk to children, older children can transmit the virus just like the adults. Some studies have also reported that children younger than 5 years old carry a higher viral load than adults, which raises more questions about their role in transmitting Covid-19^{44,46}. At the end of April 2020, approximately a hundred cases were reported among children (aged between 6 months to 9 years) mostly in Europe. They had symptoms of Kawasaki like disease which was probably linked to covid-19. About 10 cases were reported in Bergamo, Italy at the peak of the pandemic. Most children had an incomplete presentation of Kawasaki disease, however, only 1 child has classical symptoms. In June 2020 researchers identified the main symptoms and manifestations of the new syndrome which, would help diagnose and treat the condition. This research was led by the Imperial College Academic Health Science Centre (AHSC) in partnership with the clinicians from across England and the Great Ormond Street Hospital and the Kawasaki Disease Research Centre, San Diego.

The new condition names as the Paediatric Inflammatory Multisystem Syndrome Temporally associated with SARS-CoV-2 (PIMS-TS). The new condition is said to be extremely rare, but there are concerns about life-

long coronary damage, when untreated. However, treatment has an excellent outcome.

PIMS-TS affects older children (average 9 years old) when compared to the Kawasaki disease which affects younger children (average 4 years old). It appears to be high in Asian and the Black community with the symptoms— abdominal pain, diarrhea, and fever. Although researchers are not certain that PIMS-TS is caused by Covid-19, however, 90% of the children who took part in the study had evidence of current or past Covid-19 infection & the majority of these children has antibodies for Covid-19 which suggests that PIMS-TS occurs after an infection possibly due to an exaggerated immune response^{47,48}.

What is Kawasaki Disease?

Kawasaki disease is a rare pediatric vasculitis, that causes aneurysms in the arteries.

Symptoms

- Persistent fever
- Skin rash
- Enlarged lymph nodes
- Changes in mucosa and extremities

Children are presented with classical

11.1 HOW TO EFFECTIVELY COMMUNICATE WITH CHILDREN, ABOUT LIFE-THREATENING CONDITIONS?

It is a natural parental instinct to avoid talking to children about frightening things. But to be honest, it is highly likely they would have already heard it from friends, school, and even nursery. All the information would have scared their little hearts. Children, when not given more information about an illness, make their assumptions, which can be worse than the truth. It is important to answer any questions children ask, to help them differentiate between rumor and the truth.

11.2 HOW DO YOU START THE CONVERSATION?

It is important to find out what they already know! Or what they think they know. It would be helpful to ask open questions like what are their friends talking at school? What is their opinion over it?

11.3 WHAT DO I TELL MY CHILDREN?

It is particularly important to just give the right amount of information to children. For example, just answer the question they are asking. There is no need to get into biology or detailing about viruses. If your child is like mine, too mature, and asks questions about dying, you have no choice but to answer; if you do not, they tend to make their assumption that could do more harm than good. So, the answer to such questions needs to be tailored according to their age and maturity level. For example, an 8-year-old might not need statistics about fatality rates, but this would benefit a teenager. With the current evidence, it is somewhat clear that children and teenagers are the least affected and unlikely to get the severe disease, however, make sure you stress the importance of hygiene and the fact that they do act as a link to transmission.

11.4 HOW TO I DISCUSS - ABOUT A PARENT/FAMILY MEMBER SUSPECTED TO BE POSITIVE?

Life-threatening conditions can impact the physical, social, and emotional well-being of children. Especially, when it involves a family member. A cohort study (Dalton et al., 2019) of more than 60000 children was conducted in Finland, which found that there was a significant rise in the use of psychiatry services by children with parents affected by cancer.

The data collected from the health and socio-demographic survey in rural South Africa⁴ showed that there was an increase in the risk of mortality among children under 5 years of age in the months before and after the mother passed away. This shows that low-income and middle-income countries have a higher impact on life-threatening conditions. According to the WHO, about 70% of the deaths due to cancer occurs in these countries. Parents with life-threatening

conditions have a dual challenge of coping with their disease, which caring for their children.

11.5 ARE THERE ANY THINGS THAT I³ SHOULD AVOID TELLING MY CHILDREN?

Of course yes! The best thing to do is to keep them away from the news, this is particularly important for kids <10 years of age. Children >10 years of age (again you need to read your child!) they are aware of a lot of horrible things and scary stuff in the world. Although it is important to not share any fake or ridiculous stories with them.

11.6 HELPING KIDS WITH THE BIG CHANGES – LOCKDOWN!

Children are constantly busy at school with various lessons and physical activities. A lockdown is a huge change for children, even to those as young as 2 years who are used to a routine. Children, in general, need a lot of exercises and a lack of it can lead to stress and behavioral issues.

Unfortunately, it is exceedingly difficult to arrange these in a lockdown. Try to get them into the garden, if you have one, or play table tennis indoors, or follow a lot of videos and PE lessons on YouTube which you can do together from the living room helps them keep active. Young children also need a lot of play, if you have not tried playing with them, give a go now. Lots of board games and skype or zoom playdates would help!

11.7 LOCKDOWN AND CHILD ABUSE

Quarantine, Isolation, and Covid 19 is having a huge impact on family dynamics. It threatens to put children already vulnerable to abuse, exposed to an increased risk of neglect and Abuse. Abuse can be emotional, sexual, physical, and emotional. However, the closure of nurseries and schools might have affected the reporting and occurrence of child abuse. Also, with school and daycare centers closed, children are unable to discuss or share their problems and get appropriate emotional or moral support. Having said that, due to the social distancing measures imposed, children are compelled to spend more time with their parents – who are often the offenders in most cases. Studies say the youngest

of children are highly vulnerable to abuse and maltreatment.

Isolation and containment measures have brought a halt in the global economy which has led to a higher rate of unemployment. Social isolation accompanied by stress, uncertain access to food and housing, and worries about making ends meet are all the risk factors for child abuse. Various studies in the past have shown that any kind of result in an increase in all forms of child maltreatment³⁰. Economic difficulties trigger child abuse and neglect parents cannot provide for their basic needs, health, and well-being. A study in the United States on the impact of unemployment on child abuse and neglect between the years 2004 and 2012 concluded that a one percentage point increase in the unemployment rate leads to a 20% increase in neglect^{31,32}.

11.8 SPOTTING ABUSE

According to NSPCC³³, the National Society for the Prevention of Cruelty to Children (UK), it is difficult to spot the signs of abuse. The signs of neglect may be different from the signs of abuse. However, they list a few common - possible signs

- Unexplained changes in behavior or personality
- Aggressive or repeated shouting
- Hearing hitting or things being broken
- Children crying for long periods
- Very young left alone or are outdoors by themselves
- Children looking dirty or not changing clothes
- Children being withdrawn or anxious

11.9 HOW TO STAY IN TOUCH

While we cannot see each other like before, it is still important to stay in touch with the child who is vulnerable at home and have a bond. Few things that can help

- Use technology to stay connected with friends and family
- Ask open-ended questions like "what happened today?" "How was your day?" encourage the child to open up

- Create online activities together; ex reading stories or playing online games could help build a routine
- Allow them to open up about what is happening to them and what they are going through

11.10 WHAT TO DO IF A CHILD REPORTS ABUSE?

- Take them seriously
- Listen to them
- Tell them its not their fault
- Explain what you will do and report what the child has told as soon as possible to the relevant authorities in the country

11.11 ANXIETY IN CHILDREN

It is natural to be anxious, but if your child is struggling it is very important to reassure them. Focusing on the positive aspects would help, for example, point out on the recoveries, the number of doctors, nurses, and other keyworkers in the frontline helping the sick; Stressing that effective handwashing and hygiene with social distancing can help prevent infections. Avoiding kids from watching the news on their own, sticking to watching news updates at regular times. Try to find something that keeps you calm, gardening, coloring, yoga, music are a few examples that can help kids calm. There are a lot of videos to follow on YouTube. Socializing the other kids also helps in managing anxiety; this can be done either arranging a few virtual playdates, using WhatsApp, or zoom.

Children look up to their parents for cues on how to relate to their world. When they see parents stressed, it would directly affect them too. If children get scared now, it will lead to an emotional problem for months to years. If a child is overwhelmed with continuous scary news, which they don't understand or relate to it leads to a lot of ambiguity about the changes happening in the world.

The current guidance from the Centres for Disease Control and Prevention (1) to stop the spread of Covid-19:

- Wash hands as often as possible with soap and water or sanitizer

- Avoid people who are sick (anyone coughing or sneezing); cough & sneeze into a tissue and dispose of it or into your sleeve.
- Disinfect surfaces which are touched frequently like – tables, chair handles/back, door handles/knobs, switches, toilets, desks, sinks, keyboards & remotes)
- Laundry – wash clothes and washable toys as per instructions. Use the highest heat setting possible

12. CONCLUSION

Covid-19 has proven to be the most unprecedented time of our lives; it has made a huge impact on our daily lives. Many researchers around the globe scrambling for more information; collaborating to conduct potential trials in animals and humans for a safe vaccine and a quick treatment. It is very important to remember that a vaccine could take many years or at least a decade, and it would most likely take the same time to find a cure. Covid-19 is here to stay for a while; and we need to educate and train ourselves to build our lives around the virus.

Finally, a few tips from public health specialists

- Avoid close contact with people, especially in confined spaces. Wear a mask (check the rules in your country, although in most countries mask is made compulsory!) to protect yourself and others
- Wash hand frequently with soap and warm water and dry completely. (use sanitizer where soap/water are not available)
- Avoid unnecessary contact with animals (far/wild)
- If you are not wearing a mask - Cough into your sleeve or tissue (and dispose of the tissue) & wash hands
- Vulnerable people with underlying medical conditions that leave them immunocompromised, must avoid public exposure
- Disinfect highly used areas, such as doorknobs, mobiles, keyboards, and laptops

Take care of your mental health, quarantine & Isolation does not mean you cannot keep in touch with family and friends; use technology to call and stay in touch; pick up a hobby; make use of

the time with children. Be Grateful, Kind, and most importantly **Pray!**

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