

The effect of COVID-19 Pandemic on Children

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ABSTRACT

The COVID-19 pandemic and the lockdown imposed by the government are making all fearful and the sense of uncertainty of how long this pandemic will last is causing anxiety in adults and children around the globe. This unfortunate crisis has led to other related disasters among children. This research will look closer at some of the most common dangers that children are facing during lockdowns imposed by the government in order to curb the spread of the virus. The methodology employed by this writer is reviewing many articles, commentaries, advisories on children's sufferings during the COVID-19 pandemic. This writer then organized the content of articles according to several themes. These themes are the areas that have a significant impact on children whether directly or indirectly by the pandemic. As this global crisis is far from over, many steps have continuously been taken to alleviate children from the pits of danger. However, there is still a clear necessity to upgrade and update a plan of action to cater to the children's continued learning, nutrition, safety, and mental health support services during and post pandemic periods.

INTRODUCTION

The World Health Organization (WHO) declared the Covid outbreak a Public Health Emergency Concern on 30th January, 2020, and soon after, on 11th March, 2020, it declared the COVID-19, a global pandemic. COVID-19 stands for "CO"- corona, "VI"- virus, "D"- disease. This disease was formerly referred to a "2019 novel coronavirus". Hence, COVID- 19 came to be globally known.

The Covid pandemic has affected educational operations throughout the world. United Nations Educational, Scientific and Cultural Organization (UNESCO) (2020) reported 90% of the world's student population- over 1.5 billion students in 165 countries- had their education disrupted due to lockdowns, curfews, etc. imposed by governments in an attempt to control the spread of the virus. UNESCO is reaching out to support and minimize educational disruption and facilitate continuity of learning.

As schools close and lockdowns are imposed, the pandemic affects children in multiple interrelated, indirect channels and perspectives. This paper will look at how else children are affected, along with their first and biggest disruption-their education. The disruption of the children's education when their schools are not operatory as per normal have devastatingly linked other disasters for children. To do this, the method employed by this writer is reviewing many articles, commentaries, and advisories on the effects of the pandemic on children whether directly or indirectly. Then this writer arranged the content of the articles under different themes, attempting to expose the other disastrous perspectives that have damaging effects on children:

- Economic downturn: The parents of children are affected by the pandemic through their loss of income. Children will inevitably be affected by limited resources at home.

- Learning: Children's learning has stopped in many countries. Then, most countries have introduced the remote learning platform, but some low-income countries have not been able to promote remote learning at a national level.
- Nutrition: The rising rate of malnutrition during the pandemic, especially for children who have been receiving their daily nutrition at school.
- Mental Health: All the stresses brought about by the pandemic situation is putting the children at risk to child mental and psychological issues.
- Safety: The lockdown situations during the added economic downturn put the children at risk of violence and abuse.

THE IMPACT OF THE COVID-19 PANDEMIC ON CHILDREN: A THEMATIC REVIEW

- Children with Disabilities and Special Needs: There are children who are more vulnerable and are severely suffering from the impact of the pandemic, the children with disabilities and special needs who need constant care and attention.

The research questions that revolve around this topic are:

- In what devastating ways has this global crisis affected children in different parts of the world?
- What is the global picture of children's sufferings? The aim of this study is to create an awareness of children's suffering during the pandemic. This awareness will hopefully lead to contributions of any possible way to protect, secure, and alleviate victimized children who are in urgent need of help during this global crisis.

Literature Review

1. Since the type of this research is a Thematic Review, this writer has undertaken a responsibility to review many scholarly articles, commentaries, and advisories on how children are affected by the COVID-19 pandemic. Children are vulnerable victims as they depend on adults for care, protection, and security, especially where their essentials are concerned. This pandemic has affected children devastatingly whether directly or indirectly. Some of their sufferings were there before the pandemic but steps were being taken to control the tragic situation. However, the onset of the pandemic has exacerbated the sufferings to a sharp increase.

Upon reading and reviewing the scholarly articles, this writer then organized the content of the articles under several themes. These themes are areas that have affected

Children negatively during the pandemic. Since the pandemic started in March 2020, all the sources used by this writer were published in 2020-2021.

This writer identified six themes that significantly impacted children during the pandemic:

- Economic Downturn: Under this theme, this writer used statistical Reuters reports from an article warning the world that the economic downturn caused by this pandemic could kill hundreds of thousands of children in 2020 (Nichols, M. (2020)). This writer also used a report from the International Labour Organization (ILO) commenting on the anecdotal evidence from several countries that revealed the economic downturn of this pandemic has caused children to be forced to work under hazardous conditions to supplement the family's income

(International Labour Organization (ILO) and United Nations Children's Fund (UNICEF) (2020)).

- **Learning:** Under this theme, this writer used a scholarly article that studies about young children's online learning during the pandemic (Dong, C., Cao, S. & Li, H. (2020)). This writer also used an article reporting on the learning concerns during the pandemic identified by a group of international educators. The researcher also commented on an Australian report suggesting long-term structural reforms to early childhood education (Jalongo, M. R. (2021)). This writer used another article that promoted the parents to support young children's informal learning during the pandemic. The researcher mentions that The New Zealand Ministry of Education also value informal learning of young children at home (Murray, J. (2021)). This writer also used another article on how children's home learning during the lockdown in England is causing a setback in children's learning and development (Andrew, A., Cattan, S., Dias, M. C., et al. (2020)).
- **Nutrition:** Under this theme, this writer used an article that looked into children's nutrition during the pandemic (Naja, F., Hamadeh, R. (2020)). Another article that this writer used was also looking at children's nutrition during the lockdown, but the researcher made a comparative study of Saudi and British children (Bahatheg, R. O. (2021)). Another article used was looking at Italian children's nutrition during the lockdown, and also reported on children's nutrition in America through an electronic survey (Zemrani, B., Gehri, M., Masserey, E., Knob, C. & Pellaton, R. (2021)).
- **Mental Health:** Under this theme, this writer used an article reporting on the effects of covid lockdown on the mental health of Spanish children (Pizarro-Ruiz, J. P., Ordonez-Cambolor, N. (2021)). Another article used was investigating the increase of childhood depression symptoms during the lockdown (Bignardi, G., Dalmaijer, E. S., Anwyl-Irvine, A. L., Smith, T. A., Siugzdaite, R., Uh, S. & Astle, D. E. (2020)). This writer used another article reporting on child mental health before and during the lockdown in England (Newlove-Delgado, T., McManus, S., Sadler, K., Thandi, S., Vizard, T., Cartwright, C., et al. (2021)).
- **Safety:** Under this theme, this writer used an article reporting on domestic accidents of children during the lockdown, and how the paediatric emergency department for domestic accidents have significantly increased during the lockdown (Bressan, S., Gallo, E., Tirella, F., Gregori, D. & Dalt, L. D. (2021)). Another article that was used investigated risk of violence against children during the pandemic. The increase on the potential consequences of increased child maltreatment (Pereda, N., Diaz-Faes, D. A. (2020)). Another article used investigated violence against women and girls in Nepal during the lockdown (Dahal, M., Khanal, P., Maharjan, S., et al. (2020)).
- **Children with Disabilities and Special Needs:** Under this theme, this writer used an article showing that children with disabilities and special needs encounter challenges

That worsen during the pandemic lockdown (Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G. & Joshi, G. (2020)). Another article used was reporting the psychological effects of the lockdown on

children with physical disabilities (Cacioppo, M., et al. & ECHO Group (2020)). Another article this writer used was reporting the distress of parents with special educational needs and disabilities (SEND) (Ashbury, K., Fox, L., Deniz, E., Code, A. & Toseeb, U. (2021)).

ECONOMIC DOWNTURN

The economic downturn caused by the pandemic have had disastrous impact on the lives of children. Financial struggles push families to ration food and make cheaper and unhealthy food choices in order to pay for other more important expenses such as rent and medication.

Nichols (2020) reporting for Reuters states hundreds of thousands of children could die this year, while tens of thousands could fall into extreme poverty. She goes on to say that the economic downturn caused hundreds of thousands of additional deaths in 2020, reversing progress of reducing infant mortality within a year. Nichols reported that 188 countries have imposed country wide school closures affecting more than 1.5 billion children. More than two-thirds of countries have introduced distance learning but among low-income countries, only 30% can follow suit.

Due to losses in household incomes, more children could be exploited and forced into doing hazardous jobs. Children are forced to work long hours under bad working conditions to contribute to household income. Female children are expected to contribute by doing household chores, babysit or do farming chores. Their time out of school during lockdown periods are replaced with hours that can benefit the household during the crisis.

The International Labour Organization (ILO) (2020) recognizes “the right of every child to be protected from economic exploitation and from performing any work that is likely to interfere with the child’s education or harm the child’s health”. There is anecdotal evidence from several countries that reveals that children are put to work instead of adults during the pandemic. Children care for the sick at home, do grocery shopping and other activities, ignoring quarantine rules. Children are expected to supplement family income

When the adults are unable to find jobs. The ILO also reports that the remarkable progress of fewer children subjected to child labour, is now under threat. The pandemic has now reversed the progress and made child labour prevalent again.

LEARNING

With lockdowns imposed due to the pandemic, learning has been initially interrupted with postponed and rescheduled exams. With prolonged lockdowns, some countries have resorted to cancelling exams altogether. Distance learning is introduced to minimize learning loss, but not all children have digital access. The learning loss due to the pandemic triggers some children to drop out of school. This trigger becomes greater the longer schools remain closed. The death of one or both parents to Covid would make children more unlikely to return to school to try to contribute at home. These situations will turn more dangerous when these children join the wrong groups of people, initiating violence and abuse.

Dong, Cao & Li (2020) surveyed 3275 Chinese parent’s beliefs and attitudes around their young children’s online learning during the lockdown. The parents reported 84.6% of young children spent less than 30 minutes each time. The parents are not content with young children receiving online learning because they see that their

young children are unable to manipulate the online system adequately and that the parents themselves lack the professional knowledge to support their children's online learning. Nevertheless, many Chinese parents followed the suggestions from teachers and educational authorities to provide online learning to their children during the lockdown. Without training and preparation for online teaching, Chinese parents and teachers have been engaged in this brand-new experiment of digital and online learning for young children during the lockdown.

The study finds 43.1% of young children learned once per day (less than 30 minutes) and 18.4% multiple times per day. The remainder of the children learned once, twice or three times per week. The online learning was mainly delivered and guided by preschool teachers. The children were asked to watch recorded lessons online once or multiple times per day. However, most of them watched only once, twice, or three times per week, whereas some never watched it at all. The learning content included literacy, brain exercises, science, and arts. With parents present once, 38.5% of children attended online learning, and with parents present multiple times, 31.3% of children attended. Many parents commented that at the young age of their children, they should be learning in a lively and active way. However, their young children have to receive learning passively and inactively. Furthermore, it was commented that lacking social interactions with peers and teachers, the children's nature has become unstretched. Some parents mentioned that online learning is harmful for their children's eyes. 8.7% of parents say that online learning is not recommended in the early years, and it should be stopped after the pandemic. Only 8.9% are willing to pay for online learning after the pandemic. More than 50% of parents will not allow their young children to learn online after the pandemic.

Jalongo (2021) states that the pandemic has not only caused learning loss, but it is expected to diminish educational opportunities in the long run. Between late March through April 2020, more than 90% of total enrolled learners worldwide experienced nationwide school closures and were confined at home. The researcher mentioned that an international group of educators identified some learning concerns during the pandemic: Disruptions to the continuity of learning, Financial decisions about education and program viability, Negative effects on students' perception of the value of study, Drastic reductions in face-to-face teaching and instructional time, Implementation of measures to continue students' learning during school closure, Teachers' preparedness to support digital learning, When and how to reopen schools, Reductions in class size, Mobility of students and legal status of international students.

Parents during lockdown described their difficulties in motivating their children, accessing online materials, and producing satisfactory learning outcomes. Learning losses are further compounded with many children deprived of more than one year of regular interactions with peers to promote social and emotional development.

For every young child, education vulnerability persists because preschool and children in early grades often do not respond to online learning. It is crucial for them to continue learning because they are at their developmental stage socially, cognitively, and intellectually. A study reported that out of 5 million children, 31.4% of families with children ages 6-17 of low income, do not have high speed internet. This group represents 40% of all families with school-age children in America.

The researcher mentions of a report published in Australia that suggests long-term structural reforms to early childhood education: Develop a resilient, secure, and sustainable early childhood education and care system. Build schools' and teachers' capability to continue teaching and learning, learning online and via other flexible

modes of delivery, to better manage future disruptions. Focus more on student-centred learning and development of general capabilities, including resilience, creativity and problem-solving. These capabilities should be treated with the same importance as foundational skills such as literacy and numeracy. The researcher concludes the field of early childhood education and care needs to become part of the international educational landscape through these important and powerful ideas: Early childhood represents an irreplaceable opportunity for growth, development, and learning. The experiences of young children are formative and exert an influence across the lifespan. Taking positive action during the early years can prevent more serious issues later on.

Murray (2021) states that UNICEF reported that by August 2020, 90% of countries have implemented a remote learning policy for schools and 60% have done so for pre- primary learning centres. Online learning differs from remote learning in that the latter is more collaborative and features of scaffolding and active learning within an ethic of care. The experience of attempting to introduce formal education into homes during the pandemic has increased the value and recognition of teachers.

The researcher mentions a report finding that remote learning offered at the start of the lockdown in America did not continue for most children. Furthermore, one third of children have not accessed remote learning at all during the pandemic. The effects of the pandemic have confined children to their homes with fewer opportunities to learn than before the pandemic. The rich, stimulating experiences necessary to support children to develop and learn optimally are diminished. In America, Hispanic and Black children, and children with disabilities are affected particularly badly by the closure of early childhood settings. In the U.K, the poorer children are disadvantaged because family income inequality affects the time spent learning with available activities and resources for richer children. The New Zealand Ministry of Education promotes a sense of belonging for all children, advocating kindergarten professionals and families share the responsibility for children's learning during this crisis. This acknowledges the value of informal learning that children acquire by watching and taking part in family activities at home. The researcher concludes with the mention of the learning loss since March 2020, policymakers and educators in the field of early childhood education, wish to strengthen parents' capacity to support young children's informal learning well into the future.

Andrew, Cattan, Dias, et al. (2020) report on children's home learning during the lockdown in England. The researchers state that school closures are causing a setback on children's learning and development, particularly for disadvantaged children. The transition to home learning will be a challenging disruption for virtually every child in England. The researchers state their findings:

- Primary and Secondary students are spending on average about 5 hours a day on home learning. The researchers added that secondary schools are more likely to have online classes and to spend their leisure time online.
- 64% of secondary students from the richest households are being offered active help from schools in online teaching. 47% of secondary students from the poorest families are not.
- Children from rich families spend 5.8 hours a day on educational activities. Children from the poorest families spend 4.5 hours a day on educational activities. The researchers added that this difference would have a long-term consequence.
- 58% of primary students from poorer families do not have access to their own study space.
- Many parents of both primary and secondary students report struggling with supporting home learning.

- School closures are certain to increase educational inequalities. The researchers added that policymakers should be thinking about how to address this gap that is widening during the pandemic.

NUTRITION

Nichols (2020) reporting for Reuters stated that 369 million children across 143 countries rely on school meals for a reliable source of daily nutrition. Since the closure of schools, the children are forced to look for food elsewhere.

Naja and Hamadeh (2020) state that the confinement to the home during lockdowns has direct effects to children's lifestyle, including dietary habits, eating and physical activity patterns. The state of lockdown and confinement lead to irregular eating patterns and frequent snacking, which are associated with high caloric intake and increased risk of obesity. The researchers mention that compelling evidence show that dietary habits are affected by conditions of stress, distress are associated with unhealthy dietary patterns and poor quality of the diet.

Bathatheg (2021) reports that children eating habits changed during the lockdown. There is an increase in the number of overweight children in some industrialized countries. The researcher adds that young children are unable to choose the food they eat, and they need support and education on this regard. Gaining weight during childhood leads to negative health effects, for example, spinal deformities, asthma, etc. The researcher mentions of a study with its finding of one of prime factors of developing obesity is eating meals while engaging in digital technologies, for example, videogames, DVD players, etc.

The researcher concludes with recommendations of parents to be more aware of their children's nutrition during the lockdown periods. It was found in this study that Turkish children eat healthy food, in comparison with Saudi and British children. The weight gain of Turkish children was lower than the weight gain of Saudi children. Turkish children scored higher than Saudi and British children in children's healthy nutritional systems.

The healthy food habits and behaviours mentioned in this study include drinking water, eating vegetables and fruits, and for some families, drinking milk as well. This study also shows that there is a significant difference in favour of boys eating healthy foods, and thus recommendations include inviting parents to focus on their daughters' eating habits and behaviours.

Zemrani, Gehri, Maserey, Knob & Pellaton (2021) report that school closures led to the interruption of programs allowing children from poor families to receive free or subsidized lunches and healthy exposing millions of children to food in security. A study done in Italy showed that 41 obese children increased their consumption of potato chips, red meat, and sugary drinks significantly during the lockdown. These obese children decreased their time spent in sports activities by 2.3 hours per week, while their screen time increased by 4.8 hours per day. In the United States, 1048 families who are enrolled in a school-based nutrition program responded through an electronic survey. Covering four U.S. geographical areas, 93.5% reported being food insecure since the beginning of the pandemic (April 2020) and 41.4% reported a decrease in fruit and vegetable intake since the beginning of the pandemic. The researchers state that children with less favourable nutritional trends, overweight or obesity are more likely to come from lower income families.

MENTAL HEALTH

Physical distancing and movement restrictions have been seen to affect children psychologically. Children feel anxious and uncertain about their lives and their communities. Children wonder how long this crisis will last and be resolved. Many adults find difficulty in answering and explaining to children due to their age and level of understanding of the grave situation. Many global advisories from UNICEF, WHO, ILO, etc. have distributed literature on suggested ways of explaining the COVID situation to children. Nevertheless, this acute stress on children triggers long term mental health challenges.

Pizarro-Ruiz and Ordonez- Cambor (2021) study the mental health of children in Spain during the lockdown. The most visual psychological manifestations observed were the anxiety, depression, lethargy, and poor appetite of small children. Furthermore, 30% of children that were isolated or in quarantine met the clinical criteria for post-traumatic stress disorders and attended mental health services. Children between 3-6 years old were more likely to develop bonding problems and fear that the members of the family could contract the illness. From a questionnaire investigating the impact of confinement in children between 4-10 years of age, the results showed:

- Regressive behaviours, for example, wanting to sleep with their parents.
- Worsening in their vocabulary.
- Fears that were non-existent before.
- 53.5% of children showed more irritability.
- 21.2% continuous mood changes.
- 20.9% revealed trouble sleeping.
- 34.3% were more nervous.

Bignardi, Dalmaijer, Anwyl-Irvine, Smith, Siugzdaite, Uh & Astle (2020) looked at the increases in childhood depression symptoms during the lockdown. The closer researchers identify the variety of factors that are associated with the lockdown and confinement period. Loneliness in children triggers depression due to reduced access to play and activities. This situation directly impairs children's mood homeostasis. The researchers make the point that their study suggests that children's depression ratings significantly increased during the lockdown and the effect of lockdown on mental health did not significantly differ across demographic groups examining children's age, gender, and family. The findings also suggest that any more lockdown measures will likely exacerbate this increase in childhood depression symptoms which was previously uncommon in children of this age. The key implication is the association between lockdown and childhood mental health. When children return to school, their well-being, socialisation, and enjoyment are paramount.

The researchers are also looking the possibility of long-term effects. For example, "sleeper effects" which emerge sometime after an initial adversity, often in a different phase of environment. Another example of long-term effects is children's mood rebounds when school resumes.

Newlove-Delgado, McManus, Sadler, Thandi, Vizard, Cartwright, et al. (2021) report on child mental health in England before and during the lockdown. The increase in mental health problems reported in adults also affected 5–16-year-olds in England. It was 10.8% in 2017 and 16.0% in July 2020. More than a quarter of

children (5-16 years of age) reported disrupted sleep and 5.4% (one in ten) of children often and always felt lonely. During the lockdown, 12% of children had no reliable internet access at home, 19.1% had no quiet space to study and 26.9% did not have a desk. Children have been physically distanced from adults outside their family who usually monitor their well-being and intervene: 21.6% of children with probable mental health problems reported having no adult at school to turn to during the lockdown.

The researchers feel their job of investigation and reporting is far from complete. They are emphasizing that there is a moral imperative to maximize the resulting data to improve the health and well-being of children.

SAFETY

During the lockdown, families are confined at home and most likely, experiencing intense stress and anxiety. There are many cases of tragic child abuse during lockdowns as it presents an opportunity for such heinous acts on children. Since the children don't attend school in the lockdown period, teachers are not available for children to talk to and get the help they need. Being digitally connected does not make it easier to report and talk to teachers about home situations. Another related issue is when children have digital access for long periods, they are more at risk to inappropriate communication with online predators. Thus, all these issues undermine children's safety.

The increased school dropout rate is anticipated to contribute to child pregnancies. Water, sanitation, and hygiene services are also disrupted during lockdowns. Thus, children's health is at risk. Bressan, Gallo, Tirelli, Gregori & Dalt (2021) state that their investigations brought about the primary outcomes of frequent presentations for domestic accidents of children during the lockdown. Of 11 trauma-related hospitalizations from the paediatric emergency department during the lockdown: 7 were limb fractures, 3 head trauma-related injuries, and a facial fracture requiring surgery. There were other admissions during the lockdown: 3 other children had a severe mechanism of injury (2 crash injuries under metal gates and a fall from 3 metres high). There were 4 poisoning-related admissions: 2 children ingested cleaning products, 1 child inhaled fumes resulting from combining cleaning products and 1 toddler ingested a whole bottle of paracetamol. The researcher mentioned that the paediatric emergency department presentations for domestic accidents has significantly increased during the lockdown period compared with the previous year. The researchers go on to say that domestic accidents are posing a high threat to children's health during the lockdown than the pandemic itself. Thus, the researchers are calling for the reinforcement home safety and injury prevention measures in the household.

Paereda and Diaz-Faes (2020) investigate the risk for violence against children due to the covid pandemic. The researchers go on to say that lost income, cumulative material, and housing hardships are the main predictors of child maltreatment. The dramatic decline in social interactions is likely to have stopped the contact of children with reporters of child abuse, for example, paediatricians, extended family members, teachers, etc. School closures brought a decline in reported allegations of abuse, neglect, or abandonment in children to 27%. The researchers have pointed out that cultural attitudes towards children and their rights is a key risk factor for violence crisis is adult-centred, focussing on the needs of adults, and neglecting the needs of the vulnerable children and their protection. Child victimization must be prevented through spreading knowledge of risk factors

and identifying suitable forms of support and intervention. An increased in family violence is observed during this crisis and the potential consequences of increased child maltreatment should be considered in future cost-benefit analysis should there be any more lockdowns imposed by the government.

CHILDREN WITH DISABILITIES AND SPECIAL NEEDS

Children with disabilities and special needs are especially difficult to serve through digital access. Their challenges go beyond learning difficulties.

Singh, Roy, Sinha, Parveen, Sharma & Joshi (2020) report that 1 out of every 6 children, within the age group of 2-8 years of age, has neurodevelopmental, behavioural, or emotional difficulty. These are the children with disabilities and special needs: autism, attention deficit hyperactivity disorder (ADHD), Cerebral Palsy (CP), developmental delays, and other behavioural and emotional disorder. These children with disabilities and special needs encounter challenges that worsen during home confinement and lockdown. They have intolerance for uncertainty when it does not correspond with their regular routine. They have difficulty in following instructions and doing their work independently during the lockdown. The researchers state that these children feel at a loss with school closures:

- The children lack access to resource material
- They are used to peer group interactions
- They no longer have opportunities of learning and developing important social and behavioural skills.
- The longer they stay out of school, they regress and lose anchor in life.

The researchers mention that parents may not be able to handle the temper tantrums and outburst of these challenged children as parents lack the professional expertise of the therapists in schools. The researchers make a list of the difficulties faced by different challenged children. For example, children with autism find it very difficult to adapt to the changing environment of the lockdown. When anything is rearranged, these children become agitated and exasperated, their behavioural problems increase, and they can act out by self-harm. Children with Attention Deficit Hyperactivity Disorder (ADHD), need to engage in meaningful activities from the cues they get from their teachers. During the lockdown, their hyperactivity increases with heightened impulses, and so much more difficult for their caregivers to engage them in meaningful activities. Children with obsessive compulsive disorder (OCD) experience heightened distress during the lockdown as their obsessions and compulsions are related to contamination, hoarding, etc.

Cacioppo, et al. & ECHO group (2020) report the psychological effects of the lockdown on children with physical disabilities. These children showed post-traumatic stress symptoms, confusion, and anger. Children with physical disabilities have an increased risk of mental health symptoms during the lockdown. The lack of social interaction not only affect their morale, but also their ability to communicate. Moreover, children with physical disabilities have a higher risk of sedentarism which leads to a loss of motor skills because of the lack of regular rehabilitation. The loss of motor skills could further increase their difficulties in daily life and lead to conditions that lead to orthopaedic deformities or physical deconditioning. Thus, these children's physical status and functional ability will deteriorate further. The researchers mention the mental load faced by the parents of

children with disabilities during the closure of schools and some specialized services. Although the risk of the Covid infection is low for children, the indirect consequences for children with disabilities are large and long-lasting.

Asbury, Fox, Deniz, Code & Toseeb (2021) report that fear, distress, and low mood were similar for parents and children with special educational needs and disabilities (SEND). The study also illustrates the point that parents with SEND describe extreme anxiety reactions of the child, for example, the child not wanting to leave his/her bedroom and becoming more aggressive. The parental concern reported was focused on their child falling even further behind in school because the parents do not know how to meet their needs during the lockdown. The researchers find that the level of worry of children with SEND is substantial and serious. Under the category of “Loss” (loss of routine, loss of support and specialist input, financial loss), families with a child with SEND are usually unable to explain why these losses have occurred, which create further difficulties. Parents have mentioned a pressing need for their children with SEND to see familiar faces of their teacher or teaching assistant. Under “moods, emotions and behaviour” which includes acting out and behaviour change during the lockdown, parents of children with SEND have reported having to involve police, due to self-harm, and a high level of destructiveness. Under “overwhelmed”, parents of children with SEND felt the new demands placed on them in meeting all their children’s special or additional needs without support is indeed overwhelming.

DISCUSSION

ABC News (2021) has very recently announced that 252,000 children in America were diagnosed with COVID-19. This is the highest number of paediatrics cases since the pandemic began. 365 children are admitted into hospitals daily in America. The paediatric cases surge as the delta variant spreads. This tells us that the pandemic is not over and children risk being its biggest victims. This is a universal crisis, and for some children, the impact will be lifelong.

Under Theme 1: Economic downturn, a revelation of hundreds of thousands of children could die, and tens of thousands of children could fall into extreme poverty. UNICEF (2020) states it is important to access children’s material shortcomings and potential deprivations rather than just through income loss of the parents. Without important aspects of proper housing, care, sanitation or water, the situation of children’s lives during the pandemic is likely to worsen. Prevalence and number of children living in monetary-poor households globally between 2019-2021 is projected graphically for all to see the gravity of the issue.

The pandemic has also caused 200,000 more stillbirths as women are less able to receive adequate medical access. The global status of the stillbirth scenario is depicted in a graph for all to see the gravity of the issue.

The pandemic’s indirect effects threaten to increase preventable child deaths. Children’s strained health and disruptions to health services such as immunization and antenatal care resulted in over ten of thousands of children deaths. A graph depicting children living without access to essential services globally.

Child Labor during the pandemic has increased tremendously. Children forced into child labour are at risk of physical harm. Child labour restricts children’s rights, limiting their future opportunities. Furthermore, this can lead to a vicious cycle of poverty and child labour for generations. A graph depicting children (5-17 years of age) engaged in child labour globally, showing the gravity of the issue. A graph depicting half of the children in

child labour are performing hazardous work, shows the gravity of the issue. Another graph depicting 9 million more children are at risk of being forced into child labour by the end of 2022.

Learning, 1 in 7 children globally have missed more than three quarters of their in-person learning since the lockdown in March 2020. The pandemic has sharpened educational inequalities, especially for children in poorer countries. Globally, many schools lack digital resources, and many poor children do not have internet access. 1 in 3 of the world's school children had no access to remote learning when the school closed due to the pandemic. And for children who did have access were unable to take advantage of it due to skills gap among their teachers and lack of parental support. A graph depicting the percentage of students potentially reached and not reached by digital remote learning policies in different parts of the world.

In the poorest countries, school children have lost months of schooling since the pandemic began. The disruptions in children's schooling can have long lasting negative effects, especially if structured plans for catching up are not in place.

Nutrition, children are becoming malnourished during the pandemic due to the disruption of food systems, health and nutrition services, devastating livelihoods, and threatening food security. A chart depicting the nutritional status of poor children.

Mental Health, children with existing mental health functioning difficulties are particularly affected by the disruptions of services, isolation that led to worsening of symptoms during the pandemic. There are also widespread concerns about the effect of social isolation and social distancing on child wellbeing including anxiety, stress, and depression which can put children at risk for clinically significant health issues, alcohol and substance abuse and suicide. The graph depicting the global percentage of children with the increasing rate of those having anxiety, depression, and ADHD during the pandemic. A graph depicting the global status of the worsening of mental health of children ages 5-12 during the pandemic.

Safety, violence against children has increased during the pandemic globally. This will have long-lasting and costly emotional, social, and economic consequences. Laws against violence that affects children are inadequately enforced with the disruptions in services that protect children. The global status of violence that 3 in 4 children aged 2-4 years suffer physical punishment or psychological violence by parents and caregivers, 1 in 3 students aged 11-15 suffered bullying, 1 in 4 children aged under 5 years live with a mother who is a victim of intimate partner violence, is alarming. A chart depicting forms of child abuse and violence.

Violence against children include emotional, psychological, and witnessing violence. All acts of violence against children can result in death. A graph depicting the global violence rates against children in different regions of the world during the pandemic.

Child marriage (marriage before age of 18) is a violation to children's rights. Child marriage leads to suffering, for example, the child is not likely to continue school, the child is likely to experience domestic violence, and the child is likely to die due to complications of pregnancy and childbirth. The pandemic has caused a surge in child marriages. A graph depicting 10 million more girls are at risk of becoming child brides by 2030.

Children with disabilities and special needs are at risk of increased exposure to abuse and neglect, reduced access to services and general lack of recognition, during the pandemic. Children with disabilities and special needs have greater health care needs and dependence on community-based services. The disruption of these services will cause so much more difficulty, especially for children with intellectual and/or psychological

disabilities. The lockdown constraints may further put these children at risk of violence at home. A graph depicting the prevalence of illness is higher among children of disabilities. The graph depicting the disruption of services of disability-related health services such as rehabilitation services during the pandemic. A graph depicting the percentage of counties reporting disruptions in social protection systems for disabled children and adults during the pandemic. A graph depicting counties and governments that failed to adopt measures at facilitating learning for children with disabilities during the pandemic. A graph depicting most countries not engaged in planning disability-inclusive response strategies.

CONCLUSION

Children are at risk at being the pandemic's biggest and most vulnerable victims. Globally, this universal horror with the governmental strategies to curb its spread have done more harm than good to children in interrelated channels or dimensions. For some children, the impact may be lifelong. It is expected that the pandemic impact is most damaging for children in the poverty-stricken areas.

Many global organizations like UNICEF, UNESCO, etc. are repeatedly calling out for international solidarity to help children and humanity during this crisis. They are asking for all to act now, act decisively, and at a very large scale to defeat this pandemic. The reminder to nurture and invest in the children cannot be overemphasized. The fact remains, the children are our future.

Efforts are being invested into resuming school learning programs as the pandemic continues. Many aspects are being considered to provide safe approaches to re-opening schools.

UNICEF (2020) calls for global coordination to prevent the Covid pandemic crisis from becoming a "child-rights" crisis. UNICEF is advocating action to:

- Keep children healthy and well nourished
- Reach children vulnerable with water, sanitation, and hygiene
- Keep children learning
- Support families to cover the needs and care for their children
- Protect children from violence, exploitation, and abuse

REFERENCES

- ABC News. (2021, September 7). *Paediatric COVID-19 cases skyrocket as delta variants spreads*. [Video]. YouTube. Retrieved from <https://abcnews.go.com/GMA/News/video/pediatric-covid-19-cases-skyrocket-delta-variant-spreads-79889975>
- Allvin, R. E. (2020). National Association for the Education of Young Children (NAEYC). NAEYC COVID-19 statement. *NAEYC*. Retrieved from <https://www.naeyc.org/resources/blog/naeyc-covid-19-statement>
- Andrew, A., Cattan, S., Dias, M. C., et al. (2020). Learning during the lockdown: real time data on children's experiences during home learning. Economic and Social Research Council. *The Institute for Fiscal Studies*, London. Retrieved from <https://ifs.org.uk/publications/14848>
- Ashbury, K., Fox, L., Deniz, E., Code, A. & Toseeb, U. (2021). How is Covid-19 Affecting

the Mental Health of Children with Special Educational Needs and Disabilities and their Families? *Springer – Journal of Autism and Developmental Disorders*, 51(5):1772-1780. Retrieved from doi: 10.1007/s10803-020-04577-2

Bahatbeg, R. O. (2021). Young Children's Nutrition During the COVID-19 Pandemic

Lockdown: A Comparative Study. *Early Childhood Education Journal*, 49:915-923. Retrieved from <https://link.springer.com/article/10.1007/s10643-021-01192-3>

Bignardi, G., Dalmaijer, E. S., Anwyl-Irvine, A. L., Smith, T. A., Siugzdaite, R., Uh, S. & Astle, D. E. (2020). Longitudinal increases in childhood depression symptoms during the

THE IMPACT OF THE COVID-19 PANDEMIC ON CHILDREN: A THEMATIC REVIEW 33

Covid-19 lockdown. *Archives of Disease in Childhood*, 106:791-797. Retrieved from DOI: 10.1136/archdischild-2020-320372

Bressan, S., Gallo, E., Tirella, F., Gregori, D. & Dalt, L. D. (2021). Lockdown: more

domestic accidents than Covid-19 in children. *Archives of Disease in Childhood*, 106(2):1-2. Retrieved from DOI: 10.1136/archdischild-2020-319547

Cacioppo, M., et al. & ECHO Group (2020). Emerging health challenges for children with

physical disabilities and their parents during the COVID-19 pandemic: The ECHO French Survey. *Elsevier-Annals of Physical and Rehabilitation Medicine*, Article Number 101429. Retrieved from doi: 10.1016/j.rehab.2020.08.001

Dahal, M., Khanal, P., Maharjan, S., et al. (2020). Mitigating violence against women and

young girls during COVID-19 induced lockdown in Nepal: a wake-up call. *Globalization and Health*, 16,84. Retrieved from <https://doi.org/10.1186/s12992-020-00616-w>

Dong, C., Cao, S. & Li, H. (2020). Young Children's Online Learning during COVID-19 Pandemic: Chinese parents' beliefs and attitudes. *Children and Youth Services*

Review, 118:105440. Retrieved from doi: 10.1016/j.chilyouth.2020.105440 International Labour Organization (ILO) and United Nations Children's Fund (UNICEF)

(2020). Covid-10 and Child Labour: A time of crisis, a time to act. *ILO and UNICEF*, New York. Retrieved from <https://www.unicef.org/media/70261/file/COVID-19-and-Child-labour-2020.pdf>

Jalongo, M. R. (2021). The Effects of COVID-19 on Early Childhood Education and Care:

THE IMPACT OF THE COVID-19 PANDEMIC ON CHILDREN: A THEMATIC REVIEW 34

Research and Resources for Children, Families, Teachers, and Teacher Educators. *Springer- Early Childhood Education Journal*, 49:763-774. Retrieved from <https://doi.org/10.1007/s10643-021-01208-y>

Murray, J. (2021). Informal early childhood education: the influences of parents and home on

young children's learning. *Taylor and Francis – International Journal of Early Years Education*, 29(2):117-123. Retrieved from <https://doi.org/10.1080/09669760.2021.1928966>

Naja, F., Hamadeh, R. (2020). Nutrition amid the COVID-19 pandemic: a multi-level framework for action. *European Journal of Clinical Nutrition*, 74:1117-1121.

Retrieved

from

<https://doi.org/10.1038/s41430-020-0634-3>

Newlove-Delgado, T., McManus, S., Sadler, K., Thandi, S., Vizard, T., Cartwright, C., et al.

(2021). Child mental health in England before and during the Covid-19 lockdown. *The Lancet- Psychiatry*, 8(5):353-354. Retrieved from doi: 10.1016/S2215- 0366(20)30570-8

Nichols, M. (2020). U.N. warns economic downturn could kill hundreds of thousands of children in 2020. *Reuters*. Retrieved from <https://www.reuters.com/article/us-health-coronavirus-children-un-idUSKBN21Y2X7>

Pereda, N., Diaz-Faes, D. A. (2020). Family violence against children in the wake of COVID-19 pandemic: a review of current perspectives and risk factors. *Child and Adolescent Psychiatry Mental Health*, 14,40. Retrieved from <https://doi.org/10.1186/s13034-020-00347-1>

THE IMPACT OF THE COVID-19 PANDEMIC ON CHILDREN: A THEMATIC REVIEW 35

Pizarro-Ruiz, J. P., Ordonez-Cambor, N. (2021). Effects of Covid-19 confinement on the mental health of children and adolescents in Spain. *Scientific Reports*, 11, Article

Number: 11713. Retrieved from <https://doi.org/10.1038/s41598-021-91299-9>

Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G. & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Elsevier Public Health Emergency Collection- Psychiatry Research*, 293,113429. Retrieved from doi: 10.1016/j.psychres.2020.113429

United Nations Education, Scientific and Cultural Organization (UNESCO) (2020). Covid-19 Educational Disruption and Response. *ReliefWeb UNESCO*. Retrieved from <https://reliefweb.int/report/world/covid-19-educational-disruption-and-response-last-update-10-march-2020>

UNESCO Bangkok (2020). The Impact of Covid-19 on ECCE Sector: Lesson learned and promising Practices from the Asia-Pacific. *UNESCO Bangkok*. Retrieved from https://en.unesco.org/sites/default/files/unesco-covid-19_ed-webinar-14-unesco-bangkok.pdf

World Bank (2020). The Covid-19 pandemic: Shocks to education and policy responses. *World Bank Group*. Retrieved from <https://openknowledge.worldbank.org/handle/10986/33696>

Zemrani, B., Gehri, M., Masserey, E., Knob, C. & Pellaton, R. (2021). A hidden side of the COVID-19 pandemic in children: the double burden of undernutrition and overnutrition. *International Equity in Health*, 20(44). Retrieved from DOI: 10.1186/s12939-021-01390-w

THE IMPACT OF THE COVID-19 PANDEMIC ON CHILDREN: A THEMATIC REVIEW 36

Zero to Three (2020). How Covid-19 is impacting child-care providers. *Zero to Three- Early Connections last a lifetime*. Retrieved from <https://www.zerotothree.org/resources/3398-how-covid-19-is-impacting-child-care-providers>