

THE IMPACT OF THE SARS COV2 PANDEMIC ON VULNERABLE CHILDREN...GLOBAL TO LOCAL

DR VERUSCHKA RAMANJAM

NEURO-DEVELOPMENTAL PAEDIATRICIAN

2 MILITARY & RED CROSS WAR MEMORIAL HOSPITALS

UCT



VULNERABILITY

- ‘Children under the age of 18 years who are currently or are likely to find themselves in adverse conditions which may subject them to significant physical, emotional or mental stress resulting in inhibited development.’ WHO



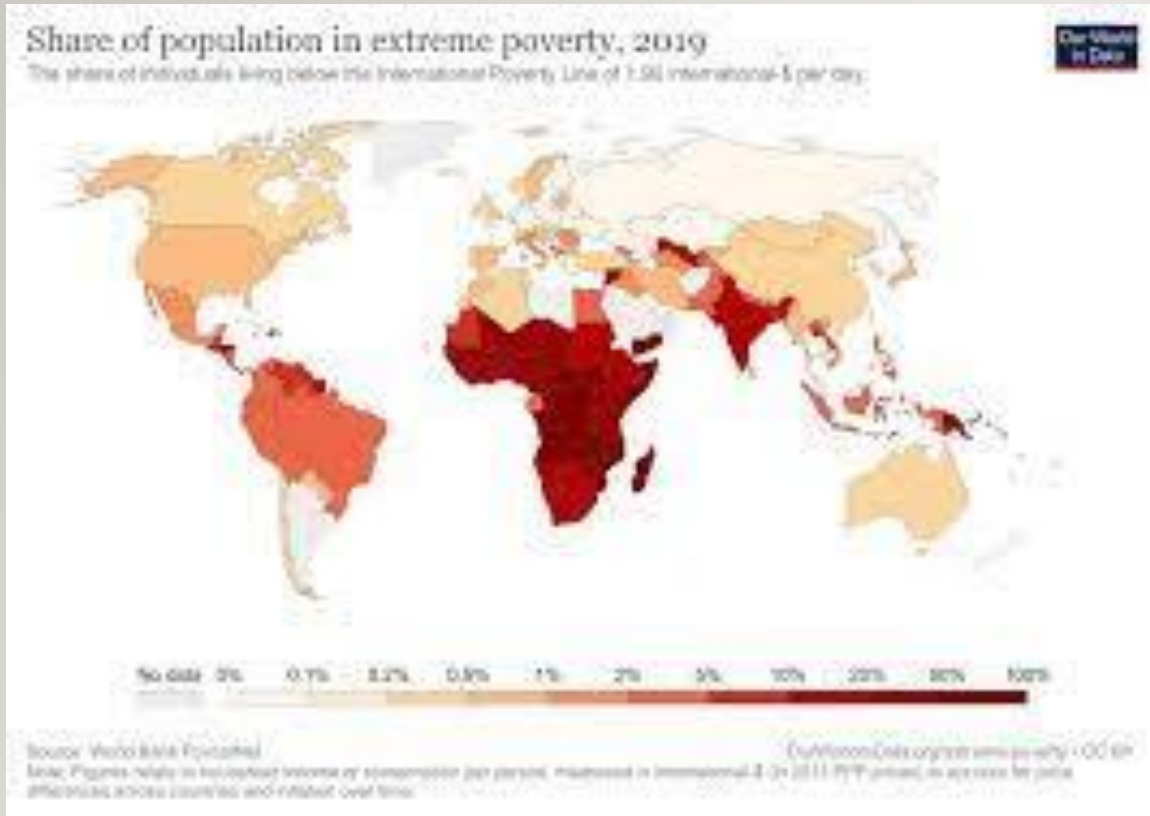
DISABILITY

WHO: Disability has 3 dimensions

- 1. Impairment in a person's body structure or function, or mental functioning.
Examples include loss of a limb, loss of vision or memory loss
- 2. Activity Limitation, such as difficulty seeing, hearing, walking or problem solving.
- 3. Participation restrictions in normal daily activities such as working, engaging in social and recreational activities and obtaining health care and preventative services



SETTING THE SCENE LONG BEFORE COVID



Over 1 billion people live with disability worldwide: WHO



WHO says more than 1 billion people across the world live with some form of disability



Disability refers to the interaction between a health condition and personal and environmental factors



80% of the 1 billion people with disabilities are living in developing countries



Nearly 46% of people with disabilities are aged 65 and over



People with disabilities are **four to 10 times** more likely to experience violence

THE PROPORTION OF PEOPLE WITH DISABILITIES TO THE WORLD POPULATION



15%

NUMBER OF PEOPLE WITH SEVERE DISABILITIES

190 MILLION

STATISTICS SOUTH AFRICA



- Mid 2018: South African population +- 57.7 million
- Of which 19.7 million were under 18 years ie. 34%
- Of which >60% live in poverty ie. 12 million
- According to the STATS SA General Household Survey of 2009... 11.2 % of South African children were disabled... vague definition seeing, hearing, walking, remembering, concentration, self care and communication..
- 28% 0 – 4yr olds, 10% of 5-9yr olds
- Huge variation : Location, socio-economic, age, gender.

UNITED NATIONS CONVENTION ON THE RIGHTS OF PERSONS WITH DISABILITIES



CRPD 10
Convention on
the Rights of
Persons with
Disabilities
2006 - 2016

- The CRPD is an international Human Rights Treaty of the United Nations intended to protect the rights and dignity of people with disability.
- The decade of Disability
- Signed into effect in March 2007
- Ratified by 164 countries including South Africa

Why is the Convention important?

- Clarifies the rights of persons with disabilities
- Sets out responsibilities to respect those rights
- Requires a rights-based approach to disability
- Promotes inclusive and accessible development
- Ensures national and international monitoring of rights



Developmental potential in the first 5 years for children in developing countries

*Sally Grantham-McGregor, *Yin Bun Cheung, Santiago Cueto, Paul Glewwe, Linda Richter, Barbara Strupp, and the International Child Development Steering Group†

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See Comment page 8

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This is the first in a Series of three articles about child development in developing countries

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Many children younger than 5 years in developing countries are exposed to multiple risks, including poverty, malnutrition, poor health, and unstimulating home environments, which detrimentally affect their cognitive, motor, and social-emotional development. There are few national statistics on the development of young children in developing countries. We therefore identified two factors with available worldwide data—the prevalence of early childhood stunting and the number of people living in absolute poverty—to use as indicators of poor development. We show that both indicators are closely associated with poor cognitive and educational performance in children and use them to estimate that over 200 million children under 5 years are not fulfilling their developmental potential. Most of these children live in south Asia and sub-Saharan Africa. These disadvantaged children are likely to do poorly in school and subsequently have low incomes, high fertility, and provide poor care for their children, thus contributing to the intergenerational transmission of poverty.

Introduction

A previous *Lancet* series¹ focused attention on the more than 6 million preventable child deaths every year in developing countries. Unfortunately, death is the tip of the iceberg. We have made a conservative estimate that more than 200 million children under 5 years fail to reach their potential in cognitive development because of poverty, poor health and nutrition, and deficient care. Children's development consists of several interdependent domains, including sensory-motor, cognitive, and social-emotional, all of which are likely to be affected. However, we focus on cognitive development because of the paucity of data from developing countries on other domains of young children's development. The discrepancy between their current developmental levels and what they would have achieved in a more nurturing environment with adequate stimulation and nutrition indicates the degree of loss of potential. In later childhood these children will subsequently have poor levels of cognition and education, both of which are linked to later earnings. Furthermore, improved parental education, particularly of mothers, is related to reduced fertility,^{2,3} and improved child survival,

health, nutrition, cognition, and education.^{4,7} Thus the failure of children to fulfil their developmental potential and achieve satisfactory educational levels plays an important part in the intergenerational transmission of poverty. In countries with a large proportion of such children, national development is likely to be affected.

The first UN Millennium Development Goal is to eradicate extreme poverty and hunger, and the second is to ensure that all children complete primary schooling.⁸ Improving early child development is clearly an important step to reaching these goals. Although policymakers recognise that poverty and malnutrition are related to poor health and increased mortality,⁹ there is less recognition of their effect on children's development or of the value of early intervention. This paper is the first of a three part series reviewing the problem of loss of developmental potential in young children in developing countries. The first paper describes the size of the issue, the second paper discusses the proximal causes of the loss, and the final paper reviews existing interventions. Here, we first examine why early child development is important and then develop a method to estimate the numbers of children who fail to fulfil their developmental potential. We then estimate the loss of income attributed to poor child development.

Why early child development is important

Children's development is affected by psychosocial and biological factors¹⁰ and by genetic inheritance. Poverty and its attendant problems are major risk factors.¹¹⁻¹⁵ The first few years of life are particularly important because vital development occurs in all domains.¹⁶ The brain develops rapidly through neurogenesis, axonal and dendritic growth, synaptogenesis, cell death, synaptic pruning, myelination, and gliogenesis. These ontogenetic events happen at different times (figure 1)¹⁷ and build on each other, such

Child development: risk factors for adverse outcomes in developing countries

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Poverty and associated health, nutrition, and social factors prevent at least 200 million children in developing countries from attaining their developmental potential. We review the evidence linking compromised development with modifiable biological and psychosocial risks encountered by children from birth to 5 years of age. We identify four key risk factors where the need for intervention is urgent: stunting, inadequate cognitive stimulation, iodine deficiency, and iron deficiency anaemia. The evidence is also sufficient to warrant interventions for malaria, intrauterine growth restriction, maternal depression, exposure to violence, and exposure to heavy metals. We discuss the research needed to clarify the effect of other potential risk factors on child development. The prevalence of the risk factors and their effect on development and human potential are substantial. Furthermore, risks often occur together or cumulatively, with concomitant increased adverse effects on the development of the world's poorest children.

Introduction

The first paper in this series showed that more than 200 million children under 5 years of age in developing countries are not fulfilling their developmental potential.¹ In this paper, we review biological and psychosocial risk factors that contribute to these adverse outcomes. We use the term risk factor to refer to biological and psychosocial hazards that can compromise development.

Figure 1 shows pathways from poverty to poor child development. Development consists of linked domains of sensori-motor, cognitive-language, and social-emotional function.² Poverty and the socio-cultural context increase young children's exposure to biological and psychosocial risks that affect development through changes in brain structure and function, and behavioural changes. Although we consider risks individually in this paper, children are frequently exposed to multiple and cumulative risks.¹ As risks accumulate, development is increasingly compromised. Data from Guatemala³ (figure 2) show a linear decrease in adolescents' school achievement and cognition with an increase in risk factors encountered by age 3 years.

As discussed in the first paper in this series,¹ children's ability on school entry is an important component in determining their progress in school. We therefore focus on risk factors in early childhood that affect readiness for school and subsequent school performance. School readiness is affected by cognitive ability, social-emotional competence (affects classroom behaviour and peer relations), and sensori-motor development (affects critical skills such as writing).⁴

We first review the effect on development of individual biological and psychosocial risk factors. Based on this review we identify key risk factors which should be the main focus for interventions. The remaining risks are grouped into those where the evidence is sufficient to

warrant implementation of interventions and those where additional information is needed.

Biological risk factors for child development Nutrition

Intrauterine growth restriction

Intrauterine growth restriction indicates constraints in fetal nutrition during a crucial period for brain development. In developing countries, intrauterine growth restriction is mainly due to poor maternal nutrition and infections. This review is restricted to infants at term with low birthweight (birthweight <2500 g; ≥37 weeks' gestation), which makes up 11% of births in developing countries.^{5,6}

At age 12 months, low-birthweight infants with intrauterine growth restriction in Brazil had lower developmental levels than infants with birthweight 3000-3499 g.⁷ Term low-birthweight infants in Guatemala had lower cognitive scores at age 2 and 3 years,^{10,11} and in Jamaica had poorer problem solving ability at 7 months¹² and lower developmental levels at 15 and 24 months,¹³ than infants with normal birthweight (≥2500 g). Effect sizes from these studies are shown in figure 3. In Brazil and Jamaica, low-birthweight infants were also rated as less active, vocal, happy, or cooperative, and in Brazil more inhibited, than infants with normal birthweight.^{11,14}

In developed countries, the effects of intrauterine growth restriction are reported to remain into adolescence and adulthood.¹⁵ However, only the Guatemala study has follow-up to these ages and no significant differences were found.^{12,16} A study in China suggests that, controlling for gestational age, infants with low birthweight are at greater risk of behavioural problems in adolescence than infants with normal birthweight.¹⁷

Food supplementation for pregnant women in Taiwan benefited child motor development at 8 months but not mental development or intelligence quotient (IQ) at

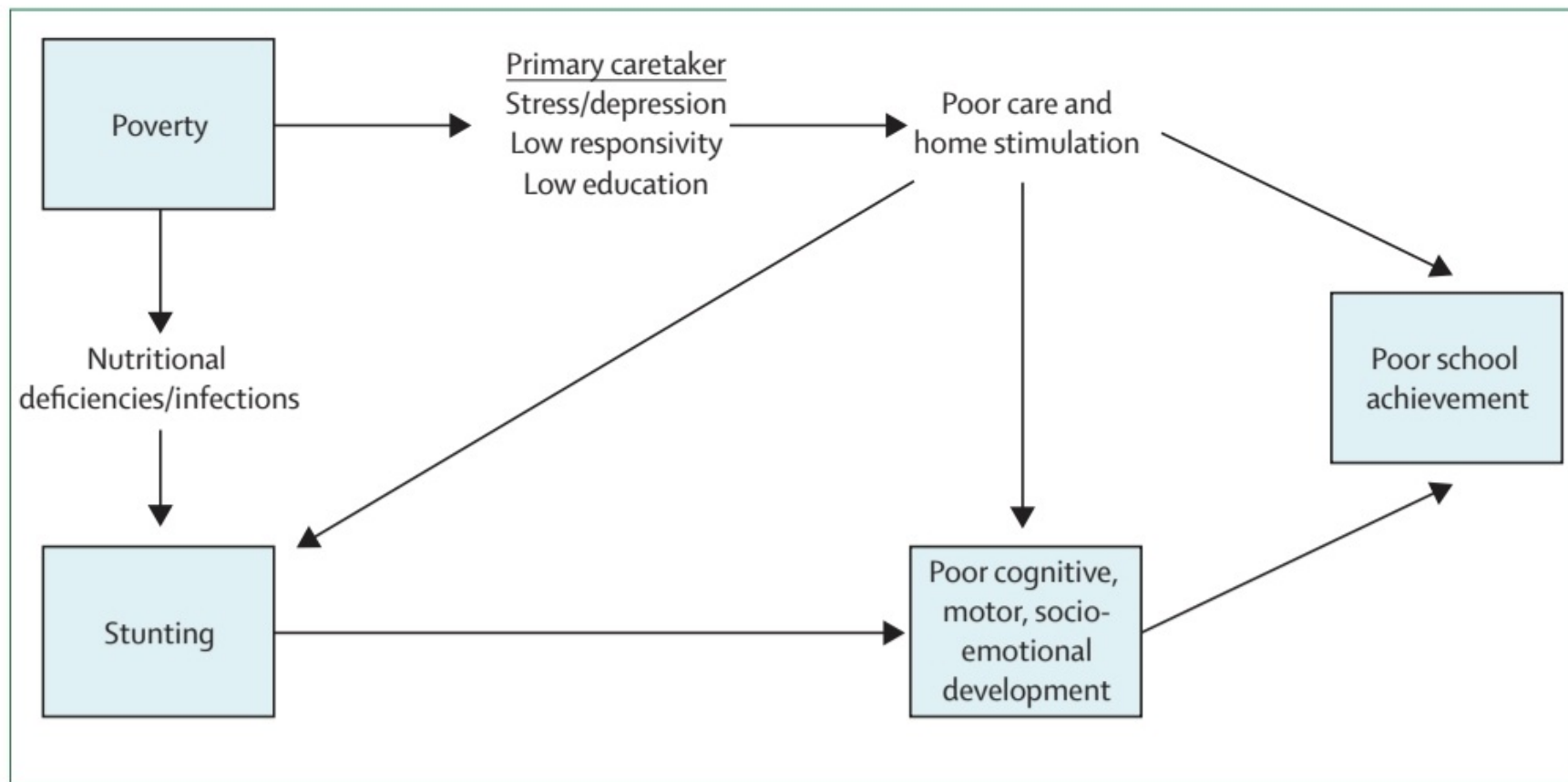


Figure 2: Hypothesised relations between poverty, stunting, child development, and school achievement

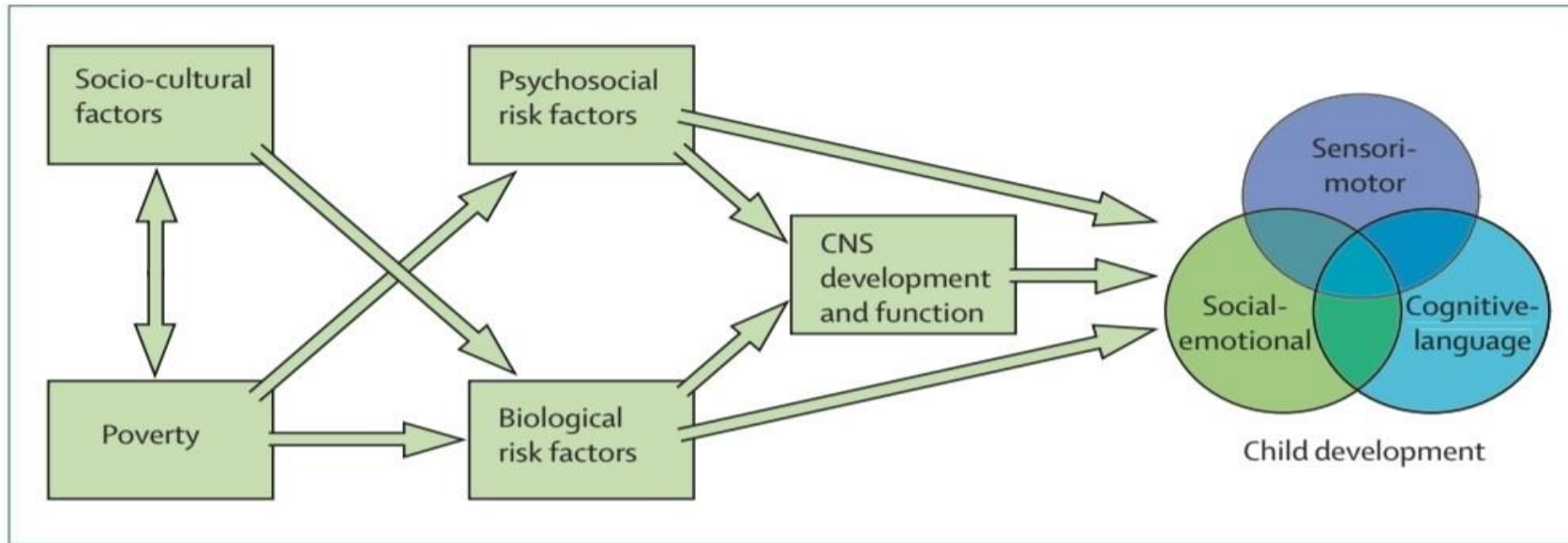


Figure 1: Pathways from poverty to poor child development

Socio-cultural risk factors include gender inequity, low maternal education, and reduced access to services. Biological risks include prenatal and postnatal growth, nutrient deficiencies, infectious diseases, and environmental toxins. Psychosocial risks include parenting factors, maternal depression and exposure to violence. Consequences of impairments in child development are likely to be inter-generational (not shown in figure). Poorly developing children are likely to remain in poverty as adults,¹ thus continuing the pathways shown for their offspring.

Strategies to avoid the loss of developmental potential in more than 200 million children in the developing world

Patrice L Engle*, Maureen M Black*, Jere R Behrman, Meena Cabral de Mello, Paul J Gertler, Lydia Kapiriri, Reynaldo Martorell, Mary Eming Young, and the International Child Development Steering Group†

This paper is the third in the Child Development Series. The first paper showed that more than 200 million children under 5 years of age in developing countries do not reach their developmental potential. The second paper identified four well-documented risks: stunting, iodine deficiency, iron deficiency anaemia, and inadequate cognitive stimulation, plus four potential risks based on epidemiological evidence: maternal depression, violence exposure, environmental contamination, and malaria. This paper assesses strategies to promote child development and to prevent or ameliorate the loss of developmental potential. The most effective early child development programmes provide direct learning experiences to children and families, are targeted toward younger and disadvantaged children, are of longer duration, high quality, and high intensity, and are integrated with family support, health, nutrition, or educational systems and services. Despite convincing evidence, programme coverage is low. To achieve the Millennium Development Goals of reducing poverty and ensuring primary school completion for both girls and boys, governments and civil society should consider expanding high quality, cost-effective early child development programmes.

Introduction

This is the third paper in a series that addresses the lost developmental, educational, and economic potential of more than 200 million children under the age of 5 years in developing countries.¹ The second paper identified risks with the strongest evidence base and highest prevalence as stunting, iodine and iron deficiencies, and inadequate cognitive and social-emotional stimulation.² Less well-documented, but with consistent epidemiological evidence, are risks related to social conditions (maternal depression and violence), environmental factors (lead and arsenic), and some infectious diseases (malaria and HIV). Risk factors often co-occur and interfere with children's development, thereby contributing to a trajectory that includes poor health, lack of readiness for school, poor academic performance, inadequate preparation for economic opportunities, and perpetuation of the inter-generational cycle of poverty.

This paper examines the effectiveness of intervention programmes in developing countries. Based on the recommendations from earlier papers in this series,^{1,2} we assess programmes that promote child development through preventing or ameliorating the effects of stunting, iodine deficiency, iron deficiency anaemia, and inadequate stimulation. We also identify examples of interventions to reduce the effects of social, environmental, and infectious risks. We include only evaluations that report cognitive or social-emotional outcomes.

Child development refers to the ordered emergence of interdependent skills of sensori-motor, cognitive-language, and social-emotional functioning (figure 1). Early child development programmes³ are designed to improve the survival, growth, and development of young children, prevent the occurrence of risks, and ameliorate the negative effects of risks. Most are directed toward

disadvantaged children. Some programmes work directly with children through improved services such as growth monitoring, early child-care centres, or improved hygiene or health services; others work with parents to improve their parenting skills and resources, through home visits, group sessions, or communication for behaviour change.

Developing country interest in early child development programmes

Awareness of child development is increasing in developing countries. The health sector has advocated for early child development programmes for children with low birth-weight,⁴ developmental delays,⁵ and from low-income disadvantaged environments.⁶⁻⁸ Child development information is often incorporated into growth monitoring charts. Government-supported preschool programmes for children are increasing; in the past 15 years, at least 13 developing countries have instituted compulsory preschool or pre-primary programmes.⁹ By 2005, the World Bank had financed loans to 52 developing countries for child development programmes, for a total of US\$1680 million, at least

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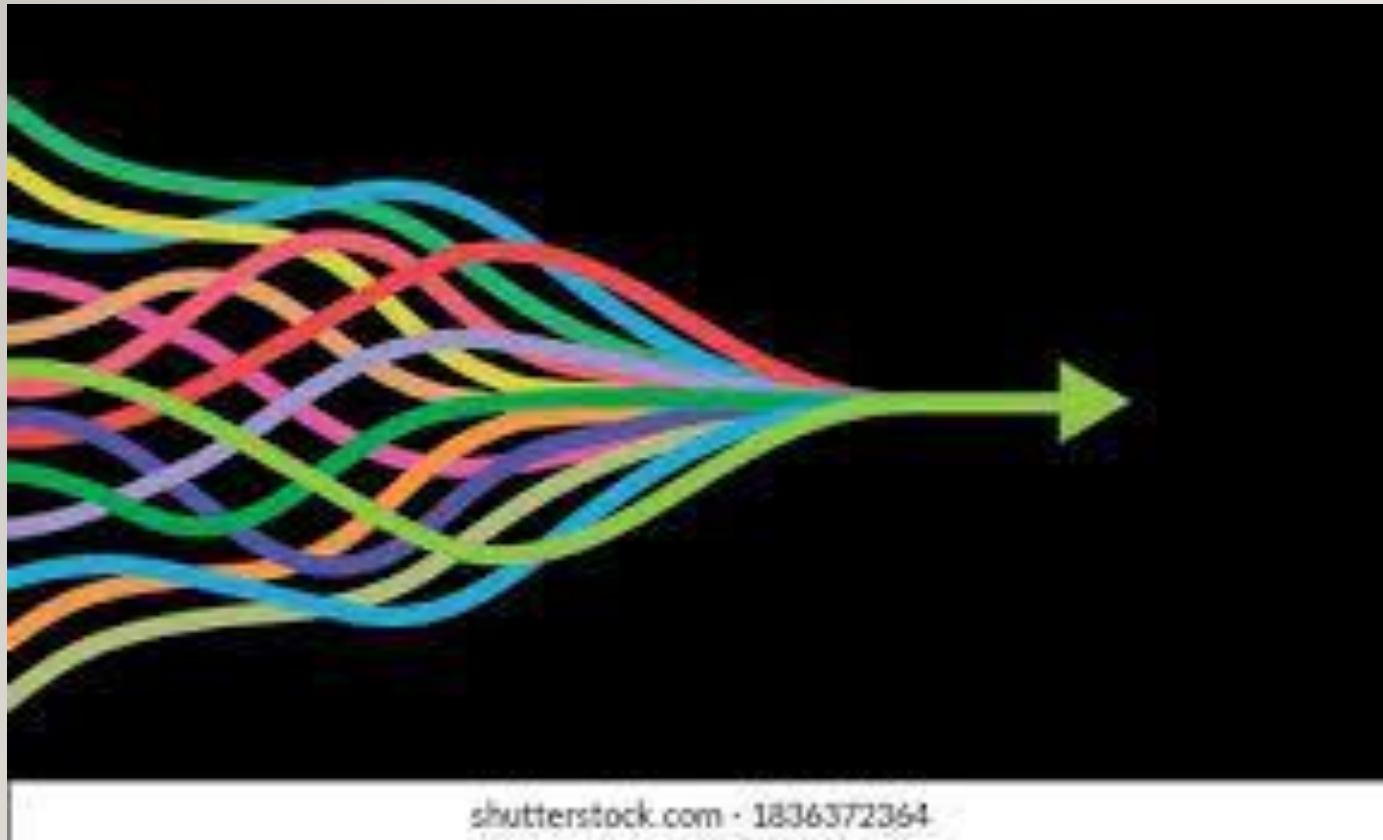
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Search strategy

Databases searched were MEDLINE (PubMed), Embase, Psych Info, the Cochrane Review, the Educational Resources Information Center (ERIC), the World Health Organization, the World Bank and the International Bureau of Education for UNESCO (United Nations Educational, Scientific and Cultural Organization), SIGLE (grey literature from Europe), LILACS (Latin American and Caribbean Health Services), and UNICEF. The UNICEF and World Bank databases were searched and queries were sent to international organisations that may have had access to unpublished evaluations, including Plan International, Save the Children, Christian Children's Fund, Aga Khan Foundation, Bernard Van Leer Foundation, Consultative Group for Early Child Care and Development, and regional early child development networks.

HOW DISABILITY AND VULNERABILITY INTERTWINE!!



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Compared with children without disabilities, children with disabilities are:



18% less likely to have improved sanitation facilities in their households

18% less likely to have improved drinking water sources in their households

10% less likely to have water and soap for handwashing in their households



1.9 times more likely to have diarrhoea

1.7 times more likely to have acute respiratory infection symptoms

1.5 times more likely to have a fever



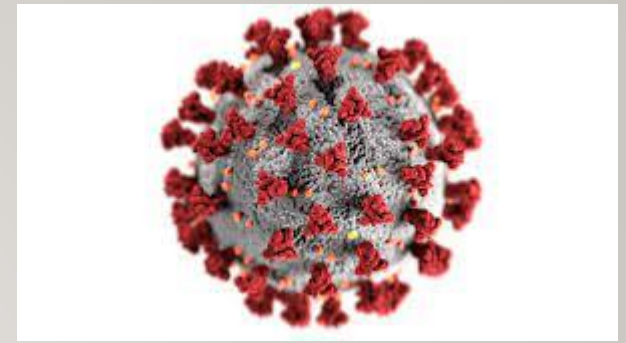
57% less likely to have children's books in their households

23% less likely to engage in early stimulation activities

32% less likely to read books or be read to at home

Notes: The analyses above estimated adjusted odds ratios using logistic regressions, with each of the variables as a dependent variable and disability as an independent variable, all of which yielded significant associations at 1 per cent $p < .01$. Regressions were adjusted for household wealth. Data on water and sanitation refer to children aged 2 to 17 years. Data on health, children's books and early stimulation refer to children aged 2 to 4 years. Data on reading or being read to refer to children aged 7 to 14 years.

THE PANDEMIC:

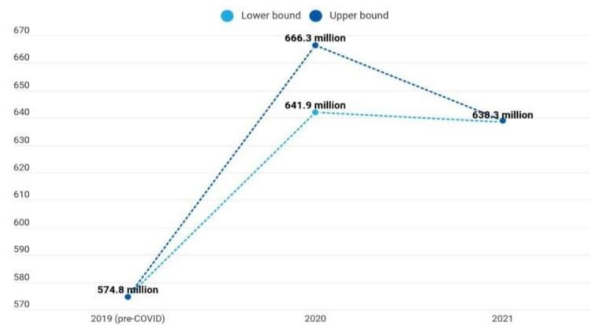


- **Globally**

-
- ‘This is a universal crisis and, for some children, the impact will be lifelong’ .
 - ‘Children are not the face of this pandemic. But they risk being among its biggest victims, as children’s lives are nonetheless being changed in profound ways. All children, of all ages, and in all countries, are being affected, in particular by the socio-economic impacts and, in some cases, by mitigation measures that may inadvertently do more harm than good.
 - Moreover, the harmful effects of this pandemic will not be distributed equally. They are expected to be most damaging for children in the poorest countries, and in the poorest neighbourhoods, and for those in already disadvantaged or vulnerable situations’.....UNICEF

An additional **60 million children** could be living in monetary poor households by the end of 2021

Number of children living in monetary poor households, 2019 estimates and 2020 – 2021 projections

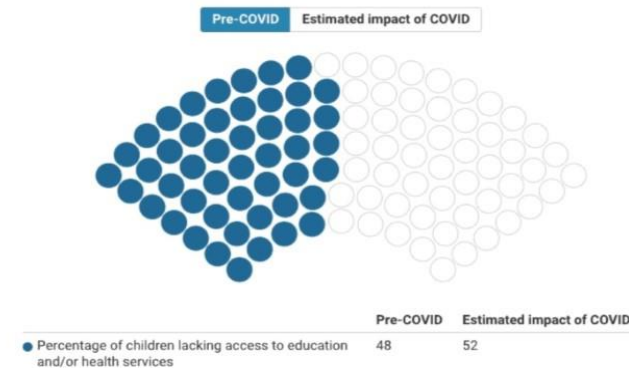


Source: Save the Children/UNICEF (2021), Impact of COVID-19 on children living in poverty: A Technical note



Approximately **100 million more children** are living in multidimensional poverty – without access to essential services

Percentage of children living in multidimensional poverty globally, based on access to education and/or health services, 2019 estimates and 2021 projections



Source: Save the Children/UNICEF (2021), Impact of COVID-19 on children living in poverty: A Technical note



UNICEF DATA HUB

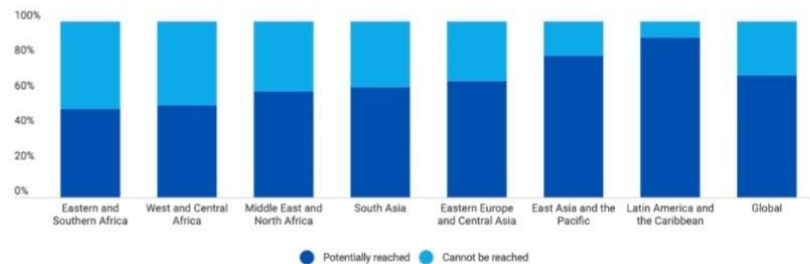
- **Intensifying hardships of poor children**

- Since children experience poverty differently than adults, it is also important to assess their material shortcomings and potential deprivations and to [measure their poverty multidimensionally](#) rather than just through income alone.
- In 2020, it was projected that approximately 150 million additional children would be living in multidimensional poverty – without access to education, health care, housing, nutrition, sanitation or water – due to the COVID-19 pandemic, according to the [analysis jointly carried out by Save the Children and UNICEF](#). Estimates derived from data from more than 70 countries indicate that around 47-48 per cent of children were severely deprived of at least one of these critical needs before the coronavirus pandemic even hit. Although the revised projections, based on schools reopening and health centers not being overburden in most countries, do not paint as a dire picture, the situation for children living in multidimensional poverty is still expected to be worse than prior to the pandemic by around 100 million children – unless national governments and the international community step up to soften the blow.



At least 463 million children worldwide were unable to access remote learning during COVID-19 school closures in 2020

Percentage and number of students potentially reached and not reached by digital and broadcast remote learning policies, by region (pre-primary to upper secondary)



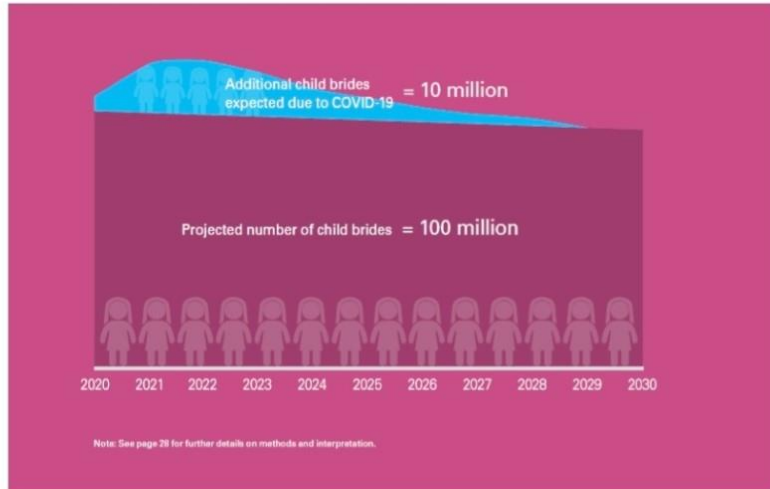
Exacerbating the learning crisis

The potential losses that have accrued in learning for today's young generation, and for the development of their human capital, are hard to fathom. Three years into the COVID-19 pandemic, 23 countries – home to nearly 405 million schoolchildren – are yet to fully open schools, with many schoolchildren at risk of dropping out.

Furthermore, nearly 147 million children missed more than half of their in-person schooling 2 years into the pandemic, with more than 27 million of them having missed at least three-quarters of in-person schooling. This amounts to 2 trillion hours of lost in-person learning globally. Emerging evidence shows that many children did not even return to school when their classrooms reopened.

At the peak of the pandemic, 188 countries imposed countrywide school closures, affecting more than 1.6 billion children and youth. Even prior to this, however, children's learning was in crisis, and the pandemic has only sharpened these inequities, hitting school children in poorer countries particularly hard. Globally, many schools lack the resources to invest in digital learning, and many children from poorer households do not have internet access.

Around **10 million** additional child marriages may occur before the end of the decade due to COVID-19



Source: COVID-19: A threat to progress against child marriage

- The everyday lives of girls have been overturned by the pandemic: their physical and mental health, their education, and the economic circumstances of their families and communities. Changes like these increase the likelihood of child marriage, and over the next decade, up to 10 million more girls will be at risk of becoming child brides as a result of the pandemic.

CLOSER TO HOME



Freshly picked vegetables from a community garden in KwaZulu-Natal © UNICEF/2020 /Ghartey

Key Facts

- 27% of children in South Africa were stunted, pre-pandemic.¹¹
- One in seven respondents of the National Income Dynamic Survey (NIDS) reported that a child had gone hungry in the last 7 days, with 8% reporting frequent child hunger of 3-days in one week.¹²
- During lockdown, national immunisation coverage dropped to 61%, down from 82% in the same month of 2019.¹³

¹¹ Gabrielle Wills et al., 'Household Resource Flows and Food Poverty during South Africa's Lockdown: Short-Term Policy Implications for Three Channels of Social Protection', Wave 1: National Income Dynamics Study (NIDS) – Coronavirus Rapid Mobile Survey (CRAM), 2020, 46.

¹² De Lannoy, A., Mudiriza, G. & Smith, C. (2020) The state of youth well-being in South Africa during the COVID-19 pandemic. Cape Town: Southern Africa Labour and Research Development Unit, University of Cape Town & Centre for Social Development in South Africa, University of Johannesburg.

¹³ UNICEF South Africa, 'South African Nutrition Brief' (Pretoria: UNICEF, 2020), <https://www.unicef.org/southafrica/media/4036/file/ZAF-Nutrition-brief-2020.pdf>.

¹⁴ Ibid.

¹⁵ Spaull et al., 'NIDS-CRAM Synthesis Report Wave', Working Paper Series, 2020, 17.

¹⁶ Adele Baleta, 'Dramatic Drop in SA's Immunisation Rates', Spotlight, 24 June 2020, <https://www.spotlightnsp.co.za/2020/06/24/dramatic-drop-in-sas-immunisation-rates/>.

- Number of COVID-19 orphans nears 150,000 in South Africa
- *UNICEF South Africa calls for a whole of society response to protect, nurture and care for the most vulnerable children.*
 - 05 September 2022

WHAT ABOUT THE DISABLED DURING THE PANDEMIC

- **‘Triple Jeopardy: Disabled People and the COVID -19 pandemic’**

www the lancet.com Vol 397 April 2021

- Increased risk of poor outcomes from COVID (both at home and in residential homes)
- Reduced access to Routine Health Care and rehabilitation (including special schools)
- The Adverse Social Impacts (and mental) of efforts to mitigate the pandemic.

More isolated and excluded (higher risk of neglect and abuse)

Practical effects of isolation and face masks eg. Hearing Impaired unable to lip read,

ID and ASD children unable to social distance, wear a mask, isolate

Unable to access vital medication..worsening of co mordities eg. Seizures, behavioural

impairment



Differences in Stress and Coping During the COVID-19 Pandemic in Families With and Without Children With Developmental Disorders or Chronic Conditions

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Objectives: To compare COVID-19-induced stress and coping in families with and without children diagnosed with developmental disorders or chronic conditions.

Methods: In this mixed-method design study, an online survey collected information on parental stress levels before and during COVID-19, sources of stress, and coping strategies using open-ended questions. Qualitative answers were categorized thematically. Multiple linear regression models were built for the association between changes in stress levels (during-before COVID-19) and sources of stress for parents of children of both groups.

Results: Answers of 1,827 parents were analyzed; of these, 186 (9.75%) had children with diagnosed problems. Changes in stress levels during vs. before COVID-19 were associated with the age of the parent, changes in working conditions, a total number of stressors, and distance learning of children. Stronger associations were found for parents of children with diagnoses. For example, for distance learning, the standardized beta (β) was 0.68 (95% confidence interval 0.37; 1.00) for parents of children without problems and $\beta = 0.73$ (0.43; 1.03) for those with problematic children.

Conclusions: Parents of children with developmental disorders need specific attention in a pandemic.

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Caring for children with disabilities places the burden of caregiving on parents in normal daily circumstances. During the pandemic, parents caring for children with special needs and disabilities could experience a low mood and distress. In particular, carers of children and adults with an intellectual disability reported significantly higher levels of mental health problems of their own in comparison with those carers whose children did not have an intellectual disability. Parents who have pre-existing mental health issues, single parents, dysfunctional families, and families that include people with post-traumatic stress disorders, anxiety, or depression, are particularly vulnerable.

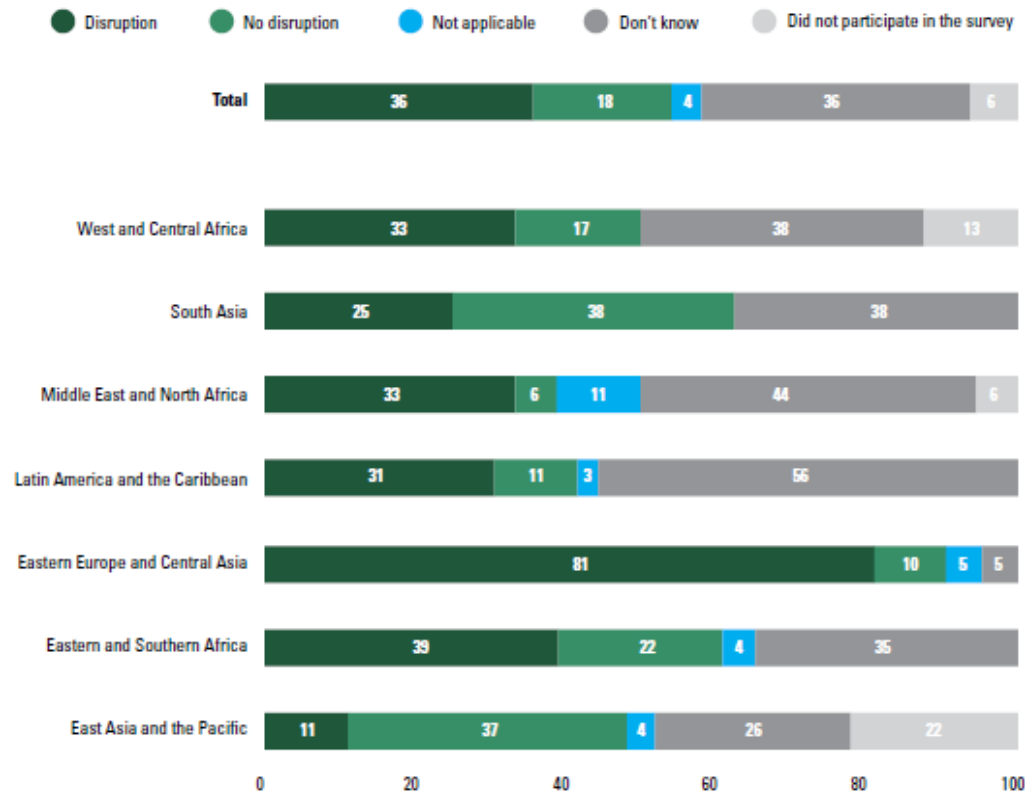
CHILDREN WITH DISABILITIES

Ensuring their inclusion in
COVID-19 response strategies
and evidence generation



unicef 
for every child

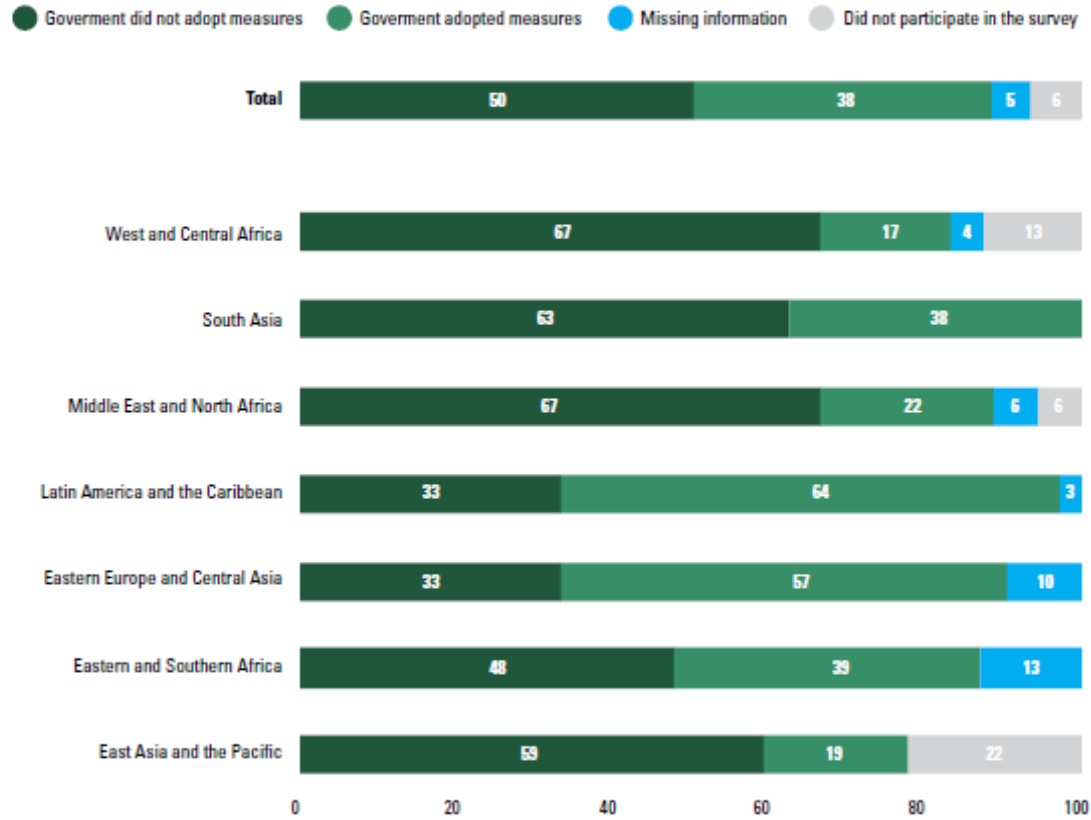
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OVER 80 PER CENT OF COUNTRIES IN EASTERN EUROPE AND CENTRAL ASIA REPORTED DISRUPTIONS IN ACCESS TO DISABILITY-RELATED HEALTH SERVICES

Figure 1. Percentage of countries reporting disruptions in access to disability-related health services (such as rehabilitation and assistive technology services)

Notes: Figures have been rounded and may not add up to 100 per cent. The estimate of 36 per cent in the "Total" bar reflects the 56 countries that reported a disruption in access to disability-related health services out of the 157 countries that received the survey. Twenty-nine countries reported no disruption, while for 62, the responses were "not applicable" or "don't know". Ten countries did not complete the survey; therefore, the number of countries with a disruption could be higher. It is important to note that some countries might have such services, but due to their nascent nature, disruption did not occur. The "not applicable" category is meant to capture situations where a service was not available in a country prior to the pandemic.



IN AT LEAST HALF OF COUNTRIES SURVEYED, GOVERNMENTS FAILED TO ADOPT MEASURES AIMED AT FACILITATING LEARNING FOR CHILDREN WITH DISABILITIES


Figure 3. Percentage of countries reporting that the government adopted measures around the provision of instruction and devices/materials accessible to children with disabilities (such as sign language for TV/online learning)

Notes: Figures have been rounded and may not add up to 100 per cent. Ten countries did not complete the survey; therefore, the number of countries where governments did not adopt measures could be higher.


KEY POINTS


- Children and families have been isolated and abandoned; and not been listened to.
- Covid restrictions meant services were stopped or reduced; and many are still slow to return.
- Mental health and wellbeing of all the family has deteriorated.
- Children's conditions have worsened and needs become more complex; delays in assessments mean needs haven't been identified.
- “ In situations where services have been disrupted, social inequalities are magnified for persons with disabilities, especially children, since they are often the most reliant on these services for their well-being” ..UNICEF

MENTAL HEALTH

- A World left in Crisis!!
-
- ‘The New Pandemic’
 - Soaring rates of Depression, Anxiety, Loneliness, Post Traumatic Stress Disorder, Alcoholism, Domestic Violence.
 - Children with Disability particularly at risk due to isolation.
 - Parents of Vulnerable children
 - High rates of neglect, and abuse
- 

Effects of COVID-19 pandemic on mental health of children and adolescents: A systematic review of survey studies

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Objective: Mental health problems among children and adolescents are increasingly observed during the outbreak of COVID-19, leading to significant healthcare concerns. Survey studies provide unique opportunities for research during this pandemic, while there are no existing systematic reviews in this setting. The objective was to summarize existing survey studies addressing the effects of the current COVID-19 pandemic on the mental health of children and adolescents.

Methods: For this systematic review, we performed an electronic search in multiple databases from December 2019 to December 2020. The quality appraisal of the included studies was performed with the Critical Appraisal Skills Programme Qualitative Checklist. Because of the high methodological heterogeneity between studies, a narrative synthesis of the qualitative data was used.



Results: In total, 35 survey studies with 65,508 participants, ranging from 4 to 19 years of age, are included in this review. Anxiety (28%), depression (23%), loneliness (5%), stress (5%), fear (5%), tension (3%), anger (3%), fatigue (3%), confusion (3%), and worry (3%) were the most common mental health issues reported. Children and adolescents with psychiatric and/or developmental disorders, such as severe obesity, chronic lung disease, attention deficit hyperactivity disorder, cystic fibrosis, and obsessive-compulsive disorders, were especially vulnerable to the mental health effects of the COVID-19 pandemic. Age, gender, psychological quality, and negative coping strategies were identified as risk factors for the development of mental health problems. Social and family support, along with a positive coping style, was associated with better outcomes.

Conclusion: The impact of the COVID-19 pandemic on mental health of children and adolescents is multifaceted and substantial. Survey studies regarding child and adolescent mental health amid COVID-19 indicated that anxiety, depression, loneliness, stress, and tension are the most observed symptoms. Positive coping strategies with family and social support may be important to achieving better outcomes. Due to limited available evidence, more well-designed studies in this area are urgently needed.



Review

Comparison of the Mental Health Impact of COVID-19 on Vulnerable and Non-Vulnerable Groups: A Systematic Review and Meta-Analysis of Observational Studies

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WHAT ABOUT OUR LOCAL EXPERIENCE?

- Red Cross Childrens' Hospital
-

- 2 Military Hospital: Similar to War!!

Limited Access to the hospital

Medical Staff – Frontline

Allied Health Staff: Roped into general hospital functions

No support in terms of technology for remote or telephonic therapy

Staff Illness and Anxiety

Parents of patients in the Armed Forces..deployed onto the streets!!

Children lost to follow up!

WITH RETURN

- Explosion of Referrals
- Long Waiting lists
- Deterioration:

Case 1. IM... 16 yr old boy with a benign brain tumor and Epilepsy

last seen in December 2019

Seizures, 3 antiepileptics, no physical disability, attending Bethel School

Returned...stooped, stiff, blistering, dry skin, cognitive slowing

Without Access to the hospital...mum increased the dose of the Lamotrigine

Severe side Effects



- Case 2: LS

3 and a half year old girl with speech and lang delay

? Strange behaviour, ? ASD

Very complex family history

? Attachment Disorder...? Severe Anxiety....? ASD ? Prognosis

- Case3

5 year old boy

Severe speech and language delay

Only drinks milk, no solids, not potty trained

More than 12 hours of Screen time every day.....!

IS THERE ANY LIGHT AT THE END OF THE COVID TUNNEL?



- The rise of civil society in response to the crisis...NGO's, Charities,Volunteers
- General sense of inclusion and looking out for one another
- Access to the Internet for online support, shopping, face time, online therapy, telephonic consultations.
- Open Access to literature
- Virtual Meetings,Webinars, sharing of information, getting advice
- We found a new way of doing things!!
- Empathy, team work
- Advocacy



The impact of COVID-19 on children: insights from the Western Cape experience

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Children's relative neglect in the initial phases of the COVID-19 pandemic, resulting in many negative direct health and collateral effects, points to the need for a purposive, co-ordinated, child-centred approach to addressing children's needs in times of crisis.



WE CAN FIGHT CORONAVIRUS TOGETHER.

Advocacy for child health

Children were inadvertently overlooked in several key decision-making and practice spaces, and concerted advocacy efforts were required at various levels of the health system to ensure that their needs were actively considered and addressed. Advocacy efforts were spearheaded by individuals, through the formation of new teams and the repurposing of existing child health fora. Initial efforts were piecemeal, 'in-the-moment', and reactive.

Governance structures such as the district level silver

GLOBAL CALL TO ACTION!



- Protecting the most vulnerable children from the impact of coronavirus:
-

- An agenda for action

- *Global coordination is urgently needed to prevent this health crisis from becoming a child-rights crisis.*

- UNICEF

- Holding Governments to account
- Holding each other to account
- Better screening, education and more effective therapeutic strategies involving family, school and communities.
- Inclusivity

'LEARN FROM YESTERDAY, LIVE FOR TODAY, HOPE FOR TOMORROW.'

– ALBERT EINSTEIN

• Thank you!

