Journal of Infectious Diseases & Therapy
ISSN: 2332-0877

Research Article Open Access

COVID-19 School Closures and The Principles of Proportionality and Balancing

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Abstract

Even though COVID-19 has an extremely low crude mortality rate among children, drastic measures to combat the disease significantly infringed the fundamental human rights of millions of children to education and protection. This article examines whether COVID-19-related school closures and the suspension of necessary measures of protection for special needs and vulnerable children were justifiable derogations from covenant obligations and international human rights law. The researcher assessed relevant treaty and covenant obligations of states parties and affirms what international human rights law determines regarding the justifiable limitation of human rights. The article centers on whether the regulations to combat the COVID-19 pandemic are, inter alia, legitimate, adequate, necessary and proportionate stricto sensu. It argues that the limitation of fundamental human rights must achieve benefits that are proportional to the cost of the limitation, and that the infringement will not be considered proportional if there are less restrictive but equally effective means to achieve the same purpose. Ultimately, it highlights that education and the necessary measures of protection for all children, specifically those children with special needs and children belonging to vulnerable groups should be one of the highest priorities in any national strategy to reopen society.

Keywords: COVID-19; Pandemic; International human rights law; UNESCO; Children's rights; Proportionality and Balancing; Limitation of rights

Introduction

In response to the COVID-19 pandemic, governments around the globe instituted various lockdown regulations in an attempt to curb the spread of the virus. These regulations led to school closures and the severe infringement of the fundamental human rights of children to education and protection [1].

According to UNESCO

Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic. These nationwide closures are impacting hundreds of millions of students. Several other countries have implemented localized closures impacting millions of additional learners [2].

Literature Review

Despite the fact that COVID-19 affected r elatively few c hildren through severe morbidity and although mortality rates among children are less than 0.1%, drastic social distancing measures and school closures significantly infringed children's fundamental human rights [3]. Many children with disabilities and special needs had their interventions suspended; immunization programs have been postponed; children with chronic health conditions were denied routine or preventive health services including screening, and many children at risk of violence, abuse and serious maltreatment are especially vulnerable due to reduced monitoring [4-7]. In the US 14% of all public-school students receive special education. In addition, approximately 1% of children and adolescents have complex medical conditions. These populations are heavily reliant on schools for special needs services [8]. A recent estimate from UNICEF indicates that 1.7 billion children live in countries where there has been a disruption of violence prevention and response services due to COVID-19 and that at their peak, nationwide school closures disrupted the learning of 91% of students worldwide [9]. Marginalized children suffer the heaviest burden: Some 463 million young people were not able to access remote learning during school closures. What is more, previous closures demonstrate that children that are out of school for extended periods, especially girls, are less likely to return [9,10].

Many governments around the globe use infection rates and the spike in infection rates as justification for harsh lockdown measures and contend that the lockdown measures are necessary to reduce infection rates and save lives. But is this accurate? Is there any data or evidence that points to lives being saved because of the lockdown measures? Did more people die per one million of the population in countries that did not institute lockdown measures? Did countries that instituted hard lockdowns experience lower infection rates than countries that did not?

There are legitimate concerns with regard to the lawfulness and justification of lockdown regulations adversely affecting children. This article critically considers whether COVID-19-related regulations that led to schools being closed and children's rights to education and appropriate measures of protection being violated can be viewed as a proportionate response and a justifiable derogation of covenant obligations in terms of international human rights law.

In the next section of this article the impact of COVID-19 on children's health and morbidity is scrutinized while Section 3 is devoted to an analysis of the major human rights conventions relating to relevant children's rights. Section 4 focuses on the justifiable limitation of fundamental human rights and a detailed proportionality analysis to determine whether lockdown regulations relating to school closures can be justified in terms of International Human Rights Law.

COVID-19 impact on children's health and morbidity

According to the Centers for Disease Control and Prevention (CDC), in the US approximately the same number of children died from respiratory-related deaths, such as influenza, pneumonia and other respiratory illnesses as from COVID-19 in the course of 2020, as can be seen below [3]:

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Received date: May 15, 2021; **Accepted date:** May 29, 2021; **Published date:** June 16, 2021

Citation: van Aardt W (2021) COVID-19 School Closures and The Principles of Proportionality and Balancing. J Infect Dis Ther 9: S3:002.

• Flu, pneumonia and other respiratory-related illnesses 0-18 years: 429

• COVID-19-related deaths 0-24 years: 437

In a recent study that focused on the comparison of clinical features of COVID-19 versus seasonal influenza A and B in US children, published on September 8, 2020, the following was found:

There were no statistically significant differences in the rates of hospitalization, admission to the intensive care unit, and mechanical ventilator use between patients with COVID-19 and those with seasonal influenza [11].

Common sense dictates that, if there are no statistically significant differences in the rates of morbidity, mortality, hospitalization, admission to the intensive care unit and the use of a mechanical ventilator between patients with COVID-19 and those with seasonal influenza, then similar measures should be taken to combat COVID-19 as have been taken over the past decades to combat influenza, seasonal flu and other respiratory illnesses.

Data from Brown University's National COVID-19 School Response Data Dashboard that includes data from 9,655,274 enrolled students, 4,884,630 students attending in person and 1,300,022 staff shows that for the period ended October 11, 2020 only 0.14% of students and 0.35% of staff had confirmed cases of the virus and that the daily case rate per 100,000 of the population were 10 (0.01%) and 25 (0.025%) respectively. For the two-week period ended January 17, 2021 the Brown University data showed that only 0.54% of students and 1.15% of staff had confirmed cases of the virus and that the daily case rate per 100,000 of the population was 38 (0.038%) and 82 (0.082%) respectively [12]. Despite the aforementioned data and evidence from countries such as Denmark, Norway, Finland, Iceland and the Netherlands where schools opened and did not see resulting increased levels of community transmission, many countries continue to keep schools closed [13].

The Public Health Agency of Sweden and the Finnish Institute for Health and Welfare published a study on the incidence of laboratory-confirmed COVID-19 infections among school-aged children in the two countries [14]. Although Finland closed schools for most children and Sweden did not, infection levels in children in both countries were very similar. During the period of February 24, 2020 to June 14, 2020 there were 1,124 confirmed cases of COVID-19 among children in Sweden, around 0.05% of the total number of children aged 1-19. Finland recorded 584 cases in the same period, also equivalent to around 0.05% of the total number of children aged 1-19 [14]. The study came to three main conclusions:

• The closure of schools had no measurable effect on the number of cases of COVID-19 among children in Sweden and Finland.

• Children are not a major risk group for COVID-19 and seem to play a less important role in transmission.

• The negative effects of closing schools must be weighed against the positive effects [14].

Separate studies by Sweden's Karolinska Institute (KI), an independent medical research institute, and the European Network of Ombudspersons for Children and UNICEF, showed that Swedish children fared better than children in other countries during the pandemic, both in terms of education and mental health [14].

On October 4, 2020, a renowned group of professors of medicine, biostatisticians, medical scientists and epidemiologists from various institutions – Harvard University, Stanford University, Oxford University, Yale University, the University of Edinburgh (Scotland), Université de Montréal and Sainte-Justine University Medical Centre, Canada and the University of Mainz (Germany) – with expertise in detecting and monitoring infectious disease outbreaks and vaccine safety evaluations – as well as more than 20,000 medical health scientists and practitioners signed the Great Barrington Declaration, which, inter alia, states:

Keeping students out of school is a grave injustice. Keeping these measures in place until a vaccine is available will cause irreparable damage, with the underprivileged disproportionately harmed. We know that vulnerability to death from COVID-19 is more than a thousand-fold higher in the old and infirm t han t he y oung. Indeed, for children, COVID-19 is less dangerous than many other harms, including influenza [15].

In light of the position of such a renowned group of professors of medicine, biostatisticians, medical scientists and epidemiologists from various institutions, harsher and more draconian measures to combat COVID-19, such as school closures, suspension of protective measures for vulnerable and special needs children, restrictions on freedom of movement and gross violation of other human rights, seem irrational.

A pertinent question arising from this is whether the regulations to combat the COVID-19 pandemic that infringes on children's right to education and protection violate international human rights law principles, or whether these are justifiable infringements in terms of international human rights, norms and principles.

International human right law

The human rights to education and appropriate measures of protection for vulnerable children and children with special needs have been recognized as fundamental human rights in a number of international human rights instruments and conventions.

Article 26 of the Universal Declaration of Human Rights (UDHR), Article 13 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), and Articles 28 and 29 of the Convention on the Rights of the Child (CRC), inter alia, determine, "States parties recognize the right of the child to education, and they shall, in particular. take measures to encourage regular attendance at schools" [16-18].

Article 24(1) of the International Covenant on Civil and Political Rights (ICCPR) further determines, "Every child shall have, without any discrimination. the right to such measures of protection as are required by his status as a minor, on the part of his family, society and the State" [19].

Article 2 of both the CRC and ICCPR specifically determines, "States parties shall respect and ensure the rights set forth in the convention and covenant to each child within their jurisdiction without discrimination of any kind" [18,19].

In terms of international legal obligations, it is important to ascertain:
the treaty;

• Which treaties and conventions a state ratified;

• Whether the state formally entered any reservation when ratifying

• Whether the treaty is currently in force;

• Which exact international legal obligations are imposed by the treaty or convention; and

• Whether the state is fulfilling its international legal obligations.

States parties are under an international legal obligation to give effect to treaty provisions when they have signed and ratified a convention without explicitly entering a reservation [20]. The CRC and ICCPR were signed and ratified by more than 196 and 173 states parties respectively [21].

States parties are legally obligated to respect and ensure by all appropriate means the realization of the fundamental human rights set forth in the various covenants to all who live within their jurisdiction [20]. This translates to an international legal obligation of means and of result. The obligation of means requires states parties to take all the necessary steps as may be necessary to give full effective practical realization to human rights and the obligation of result requires states parties to respect and ensure practically to all within their jurisdiction the rights enumerated in the conventions [20].

Limitation of human right: Derogating from covenant obligations

As fundamental human rights are not absolute but subject to restriction by other rights and the legitimate needs of society, it is necessary to assert what international human rights law determines with regard to the limitation or derogation of human rights. Generally, it is recognized that public order, safety, health and democratic values justify the imposition of restrictions on the exercise of fundamental human rights and, as such, not all infringements are unlawful [16]. An infringement that takes place in line with a valid ratio that is recognized as a legitimate justification in terms of international human rights norms will not be regarded as illegal [20].

The reasonable restriction of human rights is driven by two primary concerns. On the one hand, for the rights enshrined in international human rights law to have real meaning, the courts must be willing to defend them vigorously and subject restrictions to close scrutiny. On the other hand, the state should be permitted sufficient room to craft legislation and undertake actions that serve pressing public interest [20].

It must, however, be emphasized that fundamental human rights cannot be limited for any reason. The ratio for limiting human rights, such as vulnerable children's rights to protection and education, needs to be exceptionally strong [20]. The limitation must serve a purpose regarded by society as extremely important [20].

International human rights law obligates states to prevent, detect and respond to infectious disease, but also to have human rights laws in place to balance individual rights and public health [22]. Guidance and a legal framework to assess the legality of restrictive measures in response to national emergencies are provided by the Siracusa Principles on the Limitation and Derogation Provisions in the International Covenant on Civil and Political Rights (Siracusa Principles); Article 4 of the ICCPR; ICCPR General Comment 29 and the Human Rights Committee Statement on Derogations from the Covenant in Connection with the COVID-19 pandemic on 30 April 2020 [23-25].

The requirement for any measures derogating from covenant obligations is that it should, inter alia:

• Respond to a pressing public or social need;

• Be prescribed by law and not imposed arbitrarily;

• Be proportionate to the threat;

• Be strictly required by the exigencies of the situation;

• Be no more restrictive than required to achieve the purpose; and

• Be non-discriminatory to any specific group [22,23,26-28].

Importantly, a state party may take measures derogating from its obligations under international human rights law only "when faced with a situation of exceptional and actual or imminent danger, which threatens the life of the nation, affects the whole population, and threatens the physical integrity of the population" [23,29].

Over the past sixty years, the proportionality test – an analytical procedure similar to "strict scrutiny" in the United States – has become the standard legal test for adjudicating constitutional and human rights disputes in the world [30].

The proportionality analysis involves a two-step inquiry [31]. Firstly, it needs to be established whether a particular government measure infringes a human right. If it does, the second step is concerned with whether the interference with the human right is reasonably justified. The proportionality test provides a framework for analyzing the second question and consists of four stages, exploring whether:

• The legislative measures pursue a legitimate goal (legitimacy stage);

• There is a causal connection between the measure and the policy goal (adequacy stage);

• The measure infringes human rights no more than absolutely necessary to accomplish this goal (necessity stage); and

• The measure does not have a disproportionately adverse effect (proportionality stricto sensu stage).

In principle, each element is assessed cumulatively, and failure of a legislative measure to comply with one of the steps will render the measure unjustified and illegitimate [31-33].

Legitimacy: The first element of legitimacy establishes that the measure that interferes with a right has to have a legitimate aim and an objective of sufficient public importance [33]. The limitation of rights that does not serve the purpose of or contribute to a society based on human dignity, equality and freedom cannot be justifiable [20]. A limitation must serve a legitimate purpose that all reasonable citizens would agree to be of sufficient importance to infringe the fundamental human rights question [20].

The Siracusa Principles that were developed by international law scholars convened by the International Commission of Jurists and other partners specifically determine the following:

Public health may be invoked as a ground for limiting certain rights in order to allow a state to take measures dealing with a serious threat to the health of the population or individual members of the population. These measures must be specifically aimed at preventing disease or injury or providing care for the sick and injured [23].

It is unquestionable that states parties have an obligation to prevent, detect and respond to an infectious disease, such as COVID-19.

Adequacy: The second element of adequacy establishes that the restrictive measure that limits the fundamental human right must be appropriate to achieve the aim, and there needs to be a necessary level of certainty that it will achieve the aim. In other words, adequacy requires the existence of a reasonable connection between the measures taken by public authorities and the aim these measures seek to achieve. There must be a reasonable probability that the infringing government action will achieve its aim and produce the desired result [34]. Irrespective of

how important the purpose of the limitation is, restrictions on human rights will not be justifiable unless there is a very good and compelling reason to conclude that the restrictive measure will achieve the purpose it is designed to achieve [33]. In the case of COVID-19, the measures were and are designed to reduce infection rates and ultimately crude mortality rates.

During the initial months of the COVID-19 pandemic, many states parties justified lockdown measures against the background of a new infectious disease with much uncertainty and many unknown factors. By November 20, 2020 and after almost 11 months of extensive data collection worldwide, more than 56,623,643 confirmed cases and 1,355,963 deaths, this argument is no longer valid. It is at this stage indisputable that crude mortality rates for COVID-19 range between 0.05% and 0.10% [3,35-37]. An objective assessment of the actual situation clearly shows no difference in mortality rates, infection rates and case fatality rates between countries that imposed hard lockdown regulations, such as the United States, the United Kingdom, Spain, France, Belgium, Peru, Bolivia and Italy, and those, such as Sweden, Japan and Taiwan that did not [35,36]. On November 20, 2020, the Johns Hopkins University Mortality Analysis showed that Sweden and Taiwan, that never closed schools nor enforced human rights-infringing lockdown regulations on its population achieved better results than many countries that imposed stringent lockdowns and closed schools [37] (Table 1).

Country	Deaths per 100 k/pop	Crude mortality rate*	Case fatality rate**
Sweden	62.26	0.00062	0.032
Japan	1.52	0.00001	0.015
Taiwan	0.03	<0.001%	0.011
United States	77.19	0.00077	0.022
United Kingdom	81.02	0.00081	0.037
Spain	90.51	0.0009	0.027
France	70.46	0.0007	0.022
Belgium	133.04	0.00133	0.028
Italy	79.21	0.00079	0.037
Bolivia	78.3	0.00078	0.062
Peru	110.4	0.0011	0.038
Note: *Calculated by dividing the number of deaths by the total population.			
Note: **Calculated by dividing the number of deaths by the total number of people diagnosed with the disease.			

Table 1: It is at this stage indisputable that crude mortality rates for COVID-19 range between 0.05% and 0.10%.

If a state party's action, measure or law does not serve the purpose it intends to serve, then it cannot be a reasonable limitation. Those who wish to limit fundamental human rights must present evidence of how the limitation serves the purpose [20]. If the state action, measure or law only marginally contributes to achieving its purpose or fails to achieve its purpose, it will not be adequate to qualify as a legitimate limitation [20].

From the above data, it is apparent that there is no statistical difference between the infection rates, crude mortality rates and case fatality rates of countries that imposed hard lockdowns and those that did not. It is therefore impossible to come to a conclusion that lockdown regulations were adequate in light of the fact that the measures did not decrease infections and crude mortality rates. The intrusive measures did not achieve the purpose they were designed to achieve and therefore the measures cannot be deemed to be proportional.

Necessity: It needs to be evaluated through the third element of the proportionality test whether the state party had chosen, among the means capable of obtaining the desired end, the one that is the least restrictive [33]. To determine whether the limitation does more damage than is reasonable for achieving its purpose requires a factual assessment of the extent of the limitation [20]. The restrictive measure should impair the fundamental human right as little as possible [20,38]. The infringement will not be considered proportional if there are less restrictive, but equally effective means to achieve the same purpose [39].

The Siracusa Principles also emphasize that in applying a limitation, a state shall use no more restrictive means than are required for the achievement of the purpose of the limitation, and the burden of justifying a limitation upon a right guaranteed under the covenant lies with the state [23,40].

From the most recent data it is evident that, despite Sweden following a less restrictive approach of neither enacting a hard lockdown nor closing schools, the country's deaths per million of the population and infections per million of the population are not any worse than countries that enacted stringent lockdowns [35]. In fact, according to World Health Organization (WHO) statistics, by November 20, 2020, Sweden's death rate and number of cases per million of the population were lower than those of the United States, United Kingdom, France, Belgium and Spain that all enacted repressive lockdowns and enforced school closures (Table 2).

Country	Deaths per 1 m population	Cases per 1 m population
Sweden	627.77	19907.88
USA	750.96	34482.47
Spain	904.53	32871.48
France	716.68	31388.8
Belgium	1311.17	47470.74
Peru	1073.7	28568.34
UK	792.14	21407.36

Table 2: Death rate and number of cases per million of the population were lower than those of the United States, United Kingdom, France, Belgium and Spain that all enacted repressive lockdowns and enforced school closures.

There were and are several less restrictive choices than lockdown regulations and school closures that could have been implemented, such as the WHO targeted measures approach, a focused protect the vulnerable approach and the Swedish approach:

WHO targeted measures approach: According to the WHO Director-General Dr. Tedros Adhanom Ghebreyesus :

"It's not a choice between letting the virus run free and shutting down our societies. This virus transmits mainly between close contacts and causes outbreaks that can be controlled by implementing targeted measures. Prevent amplifying events. Protect the vulnerable. Empower, educate, and engage communities."

Dr. David Nabarro, envoy to the WHO, recently commented:

"We in the World Health Organization do not advocate lockdowns as a primary means of controlling this virus. The only time we believe a lockdown is justified is to buy you time to reorganize, regroup, rebalance your resources and protect your health workers who are exhausted. But by and large, we would rather not do it [41]."

A focused protect the vulnerable approach: The Great Barrington Declaration advocates that adopting targeted measures to protect the vulnerable should be the central aim of public health responses to COVID-19 while those in non-vulnerable groups continue life as normal [15].

The Swedish and Taiwanese approach: Sweden and Taiwan never imposed hard lockdowns, left their economies open, and made social distancing mostly voluntary [42]. Sweden kept schools open for all

children under the age of 16 while Taiwan extended only the winter break for two weeks and never closed any schools [36,42,43].

It is clear from the above that there were and are less restrictive choices available and schools can and should have remained open. All measures protecting and attending to the needs of children with special needs and those of vulnerable children should have remained functioning and operational. Teachers who fall in the vulnerable groups could have been isolated instead of isolating children who had a less than 0.1% probability of dying from COVID-19.

The Siracusa Principles specifically determine that a measure is not strictly required by the exigencies of the situation where ordinary measures would be adequate, and the principle of strict necessity should be applied in an objective manner [23]. In other words, what is strictly necessary must be determined with reference to actual objective facts and data. Each measure should be directed to an actual, clear, present or imminent danger and should not be imposed merely because of an apprehension of potential danger nor ipso facto on the basis of speculative predictive modeling nor on the basis of infections that do not cause significant mortality [23]. In determining whether derogation measures are strictly required by the exigencies of the situation, the judgment of the national authorities cannot be accepted as conclusive [23].

Given that there are less restrictive, but equally effective means to achieve the same purpose, the various lockdown regulations instituted by numerous states that adversely infringed children's rights to human dignity, education, protection and freedom of movement in the most pervasive, intrusive, damaging and restrictive manner cannot be viewed as proportional [13].

Proportionality stricto sensu: Once it has been established that the infringing containment measure has complied with the first, second and third elements of the proportionality test, it needs to be determined whether the measure is reasonable stricto sensu, or not. Proportionality stricto sensu requires that the harm done by state action, measure or law should be weighed against the benefits that the state's action, measure or law seeks to achieve [13,20]. Importantly, the measure has to represent a net gain, when the reduction in enjoyment of the right is weighed against the actual realization of the aim of the measure [33]. The limitation of fundamental human rights must achieve benefits that are proportional to the cost of the limitation [31].

In order to determine proportionality stricto sensu, international human rights law thus requires that the advantages and the disadvantages of the measure under analysis should be weighed. In French law this is called "balance between costs and benefits" [33]. A balance between costs and benefits means that any measure with a cost proportionate to its benefits is reasonable and legitimate while a measure with a cost that is disproportionate to its benefits is unreasonable and illegitimate [33].

This may be evaluated with the following formula: Using a scale of RC1 to RC10 to evaluate the degree of restriction and societal cost of the infringing measure or regulation (RC10 being the most restrictive and costly measure), a scale of SB1 to SB10 to evaluate the societal benefit derived from the infringing measure (SB10 meaning deriving the most benefit), a scale of HR1 to HR10 to evaluate the societal importance of the affected human right (HR10 meaning a human right of extreme importance) and a scale of SI1 to SI10 to evaluate the societal importance of the public policy being pursued (SI10 meaning the most important state interest):

• If Measure A's degree of restriction and societal cost is RC1 and the societal benefit SB5, and the relative importance of the affected human rights and state interest being pursued are HR10 and SI10, then the measure would be considered proportional;

• If Measure B's degree of restriction and societal cost is RC5 and the societal benefit SB6, and the relative importance of the affected human rights and state interest being pursued are HR10 and SI10, then the measure would still be considered proportional given that there is a net gain;

• If Measure C's degree of restriction and societal cost is RC5 and the societal benefit SB4 and the relative importance of the affected human rights and state interest being pursued are HR 10 and SI 10, then the measure would not be considered proportional given that there is not a net gain and therefore the measure is disproportional and illegal.

• If Measure D's degree of restriction and societal cost is RC10 and the societal benefit SB1 and the relative importance of the affected human rights and state interest being pursued are HR10 and SI10, then the measure would be considered disproportional and illegal [44].

Fundamental human rights differ in weight. A balance has to be achieved between the public interest and the interest of the individual. Where the limitation to a right is fundamental to democratic society, a higher standard of justification is required; so too, where a law interferes with the intimate aspects of private life. Moreover, in areas such as morals or social policy, greater scope is allowed. Rights such as the right to education and the right to measures of protection for special needs and vulnerable children that are of particular importance to create an open and democratic society based on human dignity, freedom and equality, carry a great deal of weight in the proportionality exercise. It will, therefore, be more difficult to justify the limitation of such rights [20]. The central issues, therefore, are weight and proportionality. To be of sufficient importance, and therefore, reasonable in outweighing the human right concerned, the societal impact of the restricting measure should represent a net gain to a society based on human dignity, freedom [20].

Costs are unavoidable when principles collide [45]. A balance has to be achieved between the general public interest and the interest of the individual. Where the limitation is to a right fundamental to democratic society, a higher standard of justification is required; so too, where a law interferes with the intimate aspects of private life such as children's right to education and measures of protection for special needs and vulnerable children [46].

The extreme adverse impacts of the lockdown measures have, inter alia, led to:

• Children with disabilities and special needs interventions being suspended;

• Children immunization programs being postponed;

• Children with chronic health conditions being denied routine or preventive health services, including screening;

• Children at risk of violence, abuse and serious maltreatment being especially vulnerable due to reduced monitoring [4-6] and

• Children at risk of malnutrition and hunger due to school feeding schemes being disrupted and children's parents losing their ability to earn an income and provide adequately for their families.

Given these, the COVID-19 lockdown measures seeking to protect public health in fact infringe and violate children's inherent right to life; their right to survival and development; their right to an adequate standard of living; their right to freedom of thought, conscience and

religion; their right to education; their right to be free from sexual exploitation and children's right to the highest attainable standard of health, to name a few [18].

With the benefit of hindsight, it has become evident that the predictive modeling and limited data initially used by many governments around the globe to justify their lockdown and school closure regulations, which inter alia comprised models that predicted more than 2,000,000 COVID-19-related deaths in the United States and 500,000 COVID-19-related deaths in the United Kingdom by October 2020, were highly speculative, woefully inaccurate, erroneous and vastly overstated the potential mortality rates and the threat to the life of the nation [47]. According to the US CDC, by November 20, 2020, 251,715 or less than 0.075% Americans out of a population of 331,515,730 had died as a result COVID-19 [3]. The CDC data further revealed that in the age groups 0-4 and 5-17, COVID-19-related deaths accounted for less than 0.1% of the age group percentage count [3].

Further modeling by the Imperial College of London during June 2020 – relying on simulated hypothetical counterfactual scenarios– purporting to show that lockdowns saved millions of lives in Europe are mathematical models created by the very same epidemiologists whose forecasts and predictive modeling have been discredited and proved wrong. These models are even less credible than the Imperial College of London's original models [47,48]. The researchers used an estimate for the virus's risk of death far higher than the current reality in their analysis of 11 European countries and found that lockdowns had worked in all 11 countries. But they included Sweden as a lockdown country, which unintentionally made the point exactly the opposite of the one they intended [48]. If Sweden had the same results as the other 10 countries, then it proves the point that lockdowns do not work [48]. The researchers further acknowledge that "Reported deaths are likely to be far more reliable than case data," making the point that the ultimate measure of whether or not lockdown measures have had the desired effect of controlling the epidemic are the crude mortality rates in the various countries [49].

The lockdown regulations instituted by numerous member states of the United Nations and resultant school closures adversely affected an estimated 1.5 billion children worldwide [4]. On October 13, 2020, the WHO underscored the risk that nearly half of the world's 3.3 billion global workforce could lose their livelihoods with 132 million additional people falling into abject poverty and under-nourishment due to the inability to earn an income during the lockdowns [50]. UNICEF confirmed that the economic crisis caused by COVID-19 threatens to hit children the hardest, with the number of children living below their national poverty lines expected to soar by 140 million by the end of the year [6]. The World Food Program (WFP) now estimates that 265 million people, many of whom children, in low- and middle-income countries are under severe threat of death due to acute hunger as a result of the lockdowns [50]. The aforementioned adverse ramifications are the results of member states' reactive lockdown measures to curb the spread of COVID-19. It is not the COVID-19 virus that is the cause of the extremely adverse consequences affecting billions of people around the world, but rather the various government lockdown regulations. COVID-19 is a highly infectious disease but has a low crude mortality rate, which has led to the mortality of approximately 1.1 million or 0.014% of the estimated 7.8 billion people in the world over a period of 10 months [35]. Infringing the human rights of 1.5 billion children, grossly violating millions of vulnerable children's right to be protected from abuse, potentially causing the starvation of 268 million people, many of whom children, due to acute hunger, and risking 1.65 billion of the global workforce to lose their livelihoods with restrictive measures aimed at prohibiting the deaths of between 1 and 5 million people globally, is simply not a proportionate response irrespective from which angle it is viewed [4].

In terms of the above formula, the harm done by the regulations would equate to Measure COVID-19, RC10, SB1, HR10, SI, and SI5. It is impossible to contemplate the formulation of a credible argument justifying proportionality stricto sensu, which requires intrusive measures to result in a net gain and the existence of a balance between conflicting rights and interests, justifying lockdown regulations that infringe a wide array of human rights of 99.9% of a population – including children's rights to education and protection – to combat a disease with a crude mortality rate of <0.1% and a case fatality rate of between 0.5% and 1% [3,35,37].

Discussion

UNICEF recently called on all governments to prioritize the reopening of schools, to take all measures possible to reopen schools safely and keep them open. The education and necessary measures of protection for all children – specifically those children with special needs and children in vulnerable groups – should be one of the highest priorities in any national strategy to reopen society [51].

The evidence and the data on the risks and costs of keeping children out of school are clear and compelling: keeping children out of school is harmful. Medical professionals from across the world, from the American Academy of Pediatrics to the Royal College of Paediatrics and Child Health have stated that the the risk associated with keeping children out of school greatly outweighs the likelihood of school-age children contributing to increases in COVID-19 cases [52,53].

All governments have a responsibility to focus on public policy that respects, protects and ensures children's fundamental human rights, well-being and long-term future in line with their international covenant and treaty legal obligations. Numerous governments around the globe, almost all states parties to the CRC and ICCPR have taken extensively harsh and repressive public health measures that infringe children's right to education and appropriate protective measures without any credible explanations regarding the legitimacy, adequacy, necessity or proportionality stricto sensu of such measures.

Conclusion

A proportionality analysis indicates that the public health measures in response to the COVID-19 pandemic instituted by numerous governments around the globe, which inter alia led to the closure of schools and the suspension of programs in terms of protection of children with special needs and vulnerable children, have breached and continue to breach certain elements of international human rights law to the detriment of hundreds of millions of children worldwide.

Governments' public health measures attempting to limit the spread of a virus with a crude mortality rate of less than 0.1% should respect and adhere to international human rights law as set out in the ICCPR, the CRC and the Siracusa Principles, and should be proportionate to the threat, be strictly necessary, based upon an objective assessment of the actual situation and the least restrictive choice. Importantly, the benefits derived from public health measures should outweigh the harm done by these measures. How individual governments and states make their decisions regarding when and how to open schools and keep them open, must avoid politicization and instead be child rights-based.

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