






REVIEW ARTICLE

Impact of COVID-19 inequalities on children: An intersectional analysis

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Abstract

Societal concerns about the effects of the COVID-19 pandemic have largely focussed on the social groups most directly affected, such as the elderly and health workers. However, less focus has been placed on understanding the effects on other collectives, such as children. While children's physical health appears to be less affected than the adult population, their mental health, learning and wellbeing is likely to have been significantly negatively affected during the pandemic due to the varying policy restrictions, such as withdrawal from face to face schooling, limited peer-to-peer interactions and mobility and increased exposure to the digital world amongst other things. Children from vulnerable social backgrounds, and especially girls, will be most negatively affected by the impact of COVID-19, given their different intersecting realities and the power structures already negatively affecting them. To strengthen the understanding of the social determinants of the COVID-19 crisis that unequally influence children's health and wellbeing, this article presents a conceptual framework that considers the multiple axes of

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inequalities and power relations. This understanding can then be used to inform analyses and impact assessments, and in turn inform the development of effective and equitable mitigation strategies as well as assist to be better prepared for future pandemics.

KEYWORDS

child health, COVID-19, education, impact, inequalities, intersectionality

INTRODUCTION

The current COVID-19 pandemic is not only a health crisis, it is also an ecological, economic, social, cultural and gender crisis of high complexity (Benach, 2021), which has been posing a huge burden on communities, households and individuals around the globe. During the very early stages of the pandemic, the initial message was that COVID-19 did not discriminate across populations, implying that the pandemic was socially neutral, and that it affected the whole of society in equal measure (Milne, 2020). This message was transmitted despite it being well known that health-related problems are not homogeneously distributed among the population and social groups and that health inequalities exist within and between societies (World Health Organization, 2008).

Health inequalities represent unfair, systematic and avoidable differences in health outcomes among social groups, where the root causes lay in our political systems and are shaped by environmental conditions (Whitehead & Dahlgren, 2006; World Health Organization, 2008). The impact of pandemics, pollution and climate change are often unequally distributed, with the most vulnerable groups in society (i.e., those with the lowest social positions due to structural determinants and unfair and avoidable social hierarchies) [R1.CH5] often being the worst affected (Barouki et al., 2021; Benach et al., 2019; Laster Pirtle, 2020). As the pandemic has unfolded, it has become clear that social inequalities play a key role in the spread and impact of the disease within and between different populations (Bambra et al., 2020). This is a consequence of different opportunities and access to economic and social resources related to health that people have depending on their social class, gender, ethnicity, migration status and territory or country of origin, and that translates into worse health outcomes among the more disadvantaged social groups (Arcaya et al., 2015; Whitehead & Dahlgren, 2006), especially those with a reduced safety net (OECD, 2020). The social inequalities generated over the past several decades, with the widespread implementation of neoliberal policies, have not only systematically increased health inequalities between and within social groups and territories globally but have also likely boosted the spread of the virus (Bambra et al., 2021; Benach, 2021; Cash-Gibson et al., 2021; Lemkow & Lemkow-Tovias, 2021).

Soon after the emergence of the pandemic, United Nations quickly warned that ‘...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’ (United Nations, 2020a). While children’s mortality and physical health appear to be much less affected by COVID-19 compared with the adult population, their mental health and wellbeing, as well as access to education and diverse social interactions, have likely been impaired, the degree to which largely depended on the social economic conditions of their home environment, and this will likely have a lasting

impact on them (de Figueiredo et al., 2021; Fore, 2020; OECD, 2020; Ramchandani, 2020; United Nations, 2020a). Although there is still rather limited information about this long-term impact, emerging evidence is pointing in this direction (Conlon et al., 2021; de Figueiredo et al., 2021; Park & Inocencio, 2020; Peterman & O'Donnell, 2020; Pietrobelli et al., 2020; Salasan Consulting Inc., 2020; Tang et al., 2021; UN WOMEN, 2020).

We are still far from comprehensively knowing the distribution, evolution and possible effects that the health crisis generated by the pandemic may have on children. An important challenge is to understand the complex social determinants that can influence the health and wellbeing of children in this enduring crisis and how these may vary by different social groups. This is relevant to better understand the long-term implications of the pandemic for children, where their main supporting and safety networks have been placed under immense pressure and how these may systematically differ amongst families and children belonging to different social groups. For example, over the past year, many children and families have experienced periodic closure of schools due to outbreaks of new COVID-19 variants. To ensure a comprehensive understanding of this impact, an intersectional approach needs to be applied, which goes beyond a predominantly biomedical perspective of the pandemic and beyond a focus on the effects of single isolated social variables to critically reflect and consider the multiple axes of inequalities, for example, social class, racialisation, ethnicity, gender, migration status, etc., as well as the structural determinants, multiple intersecting realities, social dimensions, power structures and other processes involved (Agénor, 2020; Hankivsky et al., 2014; Kapilashrami & Hankivsky, 2018). This type of knowledge will be crucial in designing ways to mitigate future social, psychological or health problems, so as to enable children to grow into healthy adults and full members of society.

In this article, we aim to analyse some of the complex social influences of the COVID-19 crisis upon children's health and wellbeing and propose a conceptual framework to support this understanding and analysis, which takes into consideration the multiple intersecting realities and power structures affecting children (See Figure 1).

Our conceptual framework represents a hypothesis on the key factors and processes involved. It can serve as a tool to guide our understanding in assessing the main determinants and relations that might shape and condition the children's health and wellbeing and generate further health inequalities amongst children from different social groups. In line with existing evidence on the social determinants of health inequalities, we consider that there are structural determinants which operate through intermediary determinants to condition and shape the opportunities for children in a given context to be healthy during the pandemic. The arrows indicate the potential processes involved and the potential direction of activity.

To proceed with the analyses, we begin with considering the role that the structural determinants of health inequalities may have in influencing and shaping children's health and wellbeing during the COVID-19 pandemic. We then move downstream in our analysis to consider the intermediary determinants.

STRUCTURAL DETERMINANTS

Socioeconomic and political context

Current European societies are highly diverse, unequal and socially stratified. Current measures at both a European and a more national level provide differing degrees of support for policies

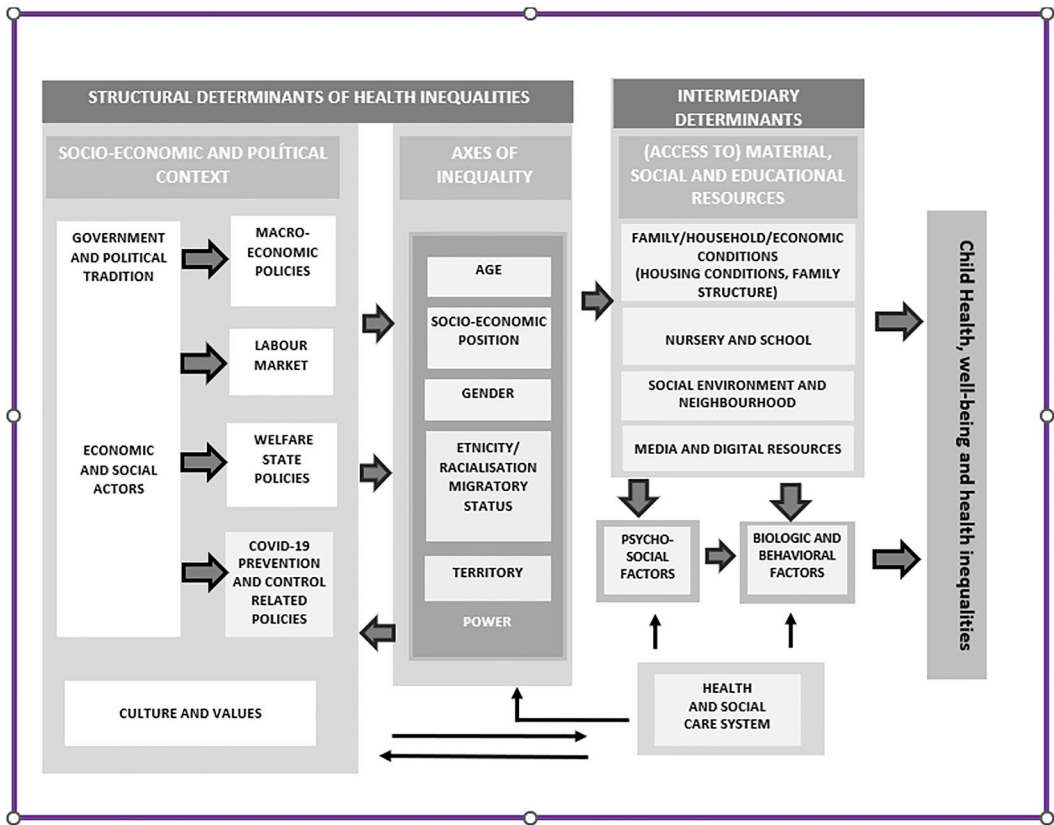


FIGURE 1 Conceptual framework of the social determinants of COVID-19 upon children's health and wellbeing. Adapted from the conceptual framework of the determinants of social inequalities in health of the Commission to Reduce Social Inequalities in Health in Spain, 2010 (In: Comisión Para Reducir Las Desigualdades Sociales En Salud En España, 2012)

addressing inequalities and gender in the labour market, yet social inequalities still endure, especially after the 2008 economic crisis.

Such a crisis not only unfolded in a way that destabilised social and economic dynamics (with an increase in poverty in families and with a particular increase in the feminisation of poverty) but also led to new political discourses with xenophobic and populist narratives (ECRI Secretariat; Directorate General II—Democracy et al., 2017) with nostalgic recipes of implementing a unified national social purity or even of the return of a national hegemony with the restoration of an imperial past, as in the case of the Brexit narratives (Virdee & McGeever, 2018) or similar narratives appearing during this period in other countries.

The origins of the pandemic and its impacts on society and individuals are to be found in the sustained roll out of neoliberal capitalism, with its inherent need for infinite economic growth and consumption, which has created rising social and health inequalities, ecological deviation and dangerous overshoots in planetary boundaries (Benach, 2021; Raworth, 2017). The socio-economic and political context largely determines the living and working conditions in which different communities and individuals live in and subsequently, their opportunities to be healthy (World Health Organization, 2008).

In addition, the context of a globalised world where digital news and physical population travel quickly along different parts of the world created the preconditions for the rapid spread of fake news that spread quickly through social networks. The fact that the virus originated in a specific Asian country, also was occasionally used by some political leaders strategically to boost their own patriotic agenda, restricting the country's access to migrants (Chaudhuri, 2021) or by directly naming the disease 'Chinese Virus' with all the geopolitical connotations involved in such naming.

Taking into account the prism of intersectionality, it can be observed that the impact of the COVID-19 pandemic has not been distributed homogeneously: groups at risk of vulnerability (with low socioeconomic status—especially with refugee or migrant status, members of an ethnic minority or other non-White populations) (Fore, 2020; Nazroo et al., 2020) as well as workers in the frontline of the pandemic (especially in highly feminised jobs, which played a central role during this pandemic) received a higher impact than those with better socioeconomic conditions such as in the case of nurses or of women working as hospital cleaners or carers of the elderly.

Governments all around the world have been forced to confront the pandemic by adopting a number of measures (UN & UNDP, 2021; UNICEF, n.d.), mostly in a hurried manner and at times with insufficient planning. This has led to the improvement of some of the health measures undertaken, but at times this has also led to unintended negative effects on certain vulnerable segments of the population (Conlon et al., 2021; Salasan Consulting Inc., 2020; The Alliance for Child Protection in Humanitarian Action, 2019; United Nations, 2020b). For example, the restrictions of people's normal mobility and social interactions have led to more social distancing to the extent of promoting situations of strict social isolation.

Axes of inequality

To analyse the impact of COVID-19, a number of axes of inequality are taken into consideration as factors and contexts that lead to relevant social inequalities (and hence to a major impact of the virus), specifically in certain communities and social groups. This section presents these main axes of inequality, such as socioeconomic circumstances, environmental degradation or gender amongst others.

Social inequalities in health are an integral part of contemporary societies and are largely generated by social inequalities intrinsic to our political and social systems. Inequities in health represent the unfairness and avoidable differences in levels of health caused by social, economic and environmental conditions. For example, the socioeconomic circumstances of different communities and individuals largely determine their living and working conditions and the quality of their housing, environment, education and lifestyles. All these elements have a notable impact on health (Marmot et al., 2010; OECD, 2020). This is the setting in which COVID-19 and climate change are embedded. COVID-19 in many respects reflects traditional socio-epidemiological patterns of mortality and morbidity in terms of socioeconomic status and related variables (Bambra et al., 2021; de Figueiredo et al., 2021; Gupta & Jawanda, 2020; OECD, 2020; The Alliance for Child Protection in Humanitarian Action, 2019).

In addition, evidence from previous epidemiological crises (Lokot & Avakyan, 2020; Save the Children, 2020; The Alliance for Child Protection in Humanitarian Action, 2018; UN WOMEN, 2020; United Nations, 2020a, 2020b) show that girls and women are amongst those most affected, especially if they are from already vulnerable groups, through intersecting power structures and the dynamics affecting them (e.g., as immigrants, refugees and persons with low

income or persons with a disability—due to pre-existing co-morbidities, poorer socioeconomic or living conditions, social isolation, mental health issues or other types of existing barriers to access to health services) (Fore, 2020; Gupta & Jawanda, 2020; Hall et al., 2020; Logie & Turan, 2020; Lokot & Avakyan, 2020; Nazroo et al., 2020; Salasan Consulting Inc., 2020).

In the current crisis, members of communities at risk of vulnerability or others of lower status, namely female workers, particularly single mothers, vulnerable communities (i.e., minorities, migrants, etc.) and people with a disability (Gupta & Jawanda, 2020; Salasan Consulting Inc., 2020) have also been most affected by the pandemic and the effects of the countermeasures undertaken (Hall et al., 2020; Lokot & Avakyan, 2020; Park & Inocencio, 2020; Save the Children, 2020; United Nations, 2020a, 2020b). This in turn has likely had a strong negative effect upon their children. If we focus on children, we know that their wellbeing is very much dependent on the social and economic circumstances of the home environment (Conlon et al., 2021; de Figueiredo et al., 2021; OECD, 2020; The Alliance for Child Protection in Humanitarian Action, 2019). While their physical health has been shown to be less affected by COVID-19, we know much less about the effects this has had on their mental and social wellbeing.

In fact, the implementation of social distancing and social isolation to contain the spread of the virus has meant that many women and girls, particularly in traditional societies, have been forced 'back into the home'. This has seriously put at risk decades of many socio-cultural and personal conquests for women that have been long fought for in terms of equal decision-making and equal treatment as well as increased the risk of suffering from gender-based violence (Bambra et al., 2021; De Paz et al., 2020; Gupta & Jawanda, 2020; OECD, 2021; Park & Inocencio, 2020; Peterman & O'Donnell, 2020; Salasan Consulting Inc., 2020; Save the Children, 2020; UN WOMEN, 2020; United Nations, 2020b). Besides, informal networking support spaces for mothers have been weakened due to the new regulations imposed, leading to a major overlapping between domestic and professional spaces (Patnaik, 2021), which can make domestic life more difficult without external safety nets to rely on, making them more vulnerable to economic, emotional and even sexual or other physical risks (Chaudhury, 2021; Salasan Consulting Inc., 2020).

In this context, the consequences for girls not being able to regularly attend school could be very serious (Bambra et al., 2021; De Paz et al., 2020; Salasan Consulting Inc., 2020; UNICEF, n.d.): from missing opportunities to encounter alternative female referents to those found at home or at family level, to not finding opportunities of equal interactions with their male peers in a co-educational setting (OECD, 2020) or not being able to access different children's books or pedagogical materials where they could discover new possibilities of questioning social stereotypes regarding gender and equity (Park & Inocencio, 2020; Unterhalter et al., n.d.). In addition, where external support is lacking, households might end up putting additional pressure on girls to make them assume traditional gender roles and tasks where 'women still bear the larger burden of households chores and child and elder care' (Patnaik, 2021). Furthermore, additional evidence from previous pandemics show that when boys and girls abandon schooling for a period of time, girls tend to assume traditional caregiver roles more than boys, and there is also an additional risk of abandoning schooling, which puts at risk their other previously existing professional options, personal interests and career opportunities (Save the Children, 2020; United Nations, 2020b). Therefore, due to the new circumstances and confinement regulations, the pandemic may be jeopardising children's, and particularly girls', access to education, pedagogical support and opportunities.

Collectively, this could lead to long-term negative consequences for women and girls, leading to an increase in the currently existing inequalities due to their different intersecting realities

and the power structures and dynamics affecting them (Bambra et al., 2021; Salasan Consulting Inc., 2020; United Nations, 2020b). Further assessments should consider intersectionality to better understand how different social groups from diverse mixed backgrounds and realities are being affected by political decisions, to support the design and implementation of effective interventions (Agénor, 2020; Hankivsky et al., 2014; Kapilashrami & Hankivsky, 2018).

Race/ethnicity/place of origin, or rather, racialisation is another important social determinant of health (Cheng & Conca-Cheng, 2020; Marron, 2021; Sabatello et al., 2021). Racism, as a result of power dynamics using the socio-political construct of race, can generate health inequalities amongst racialised communities (Devakumar et al., 2020; Tsai, 2021). Hence, in the context of health inequalities, minorities and immigrant communities—including children—are often the most vulnerable and exposed to many occupational and environmental hazards, and this can negatively affect their health outcomes, wellbeing and education. Not surprisingly, this has also been the case during the COVID-19 pandemic (Cholera et al., 2020; Kim & Bostwick, 2020; Marron, 2021; Nazroo et al., 2020; Sabatello et al., 2021). Certain communities have already been targeted amid this crisis, for example, from the Roma population in Spain to Chinese citizens in the US, Black citizens in China or Muslims, North European and other minorities in India (Vivek, 2020) amongst others worldwide. It is only a matter of time that similar attitudes will be widely observed in children (Karalis Noel, 2020; Wang et al., 2021) when relating to children or adults from backgrounds different from theirs and seeing them as perpetual foreigners and in the light of common racialised tropes, including that historically recurrent racist trope of being disease carriers (Chaudhuri, 2021; Cheah et al., 2020; Devakumar et al., 2020; Elias et al., 2021; Wang et al., 2021). In fact, following Talcott Parsons and Goffman, illness has always been associated with the social imaginary with changes in the normal behaviour and social standards (i.e., with the emergence of new social roles and stigma carriers) (Chaudhuri, 2021).

Unfortunately, racism can be further exacerbated due to the rise of fake news and deliberate misinformation, including implicit and explicit racist claims in traditional and social media, as witnessed during the Brexit campaign, for example, (Elias et al., 2021; Inter-Agency Standing Committee (IASC), 2020; Karalis Noel, 2020; Tasnim et al., 2020; Virdee & McGeever, 2018; Wang et al., 2021) examined below. As in previous pandemic crises, such an ‘othering’ process can lead to social stigma of certain communities (Hall et al., 2020; The Alliance for Child Protection in Humanitarian Action, 2018; Wang et al., 2021) and thus to racist attitudes that push entire communities (and their children) into a severe axis of inequality. The social isolation of children from different backgrounds, cultural realities and socioeconomic strata puts them at risk of increasing this ‘othering’ process with their peers (Laster Pirtle, 2020; Logie & Turan, 2020). Experiences of racism and discrimination often repeatedly over time and accumulatively lead to inequalities across a person’s life course (Bécares et al., 2015; Gee et al., 2012) and especially, of increasing the ‘fear of the other’ (Wang et al., 2021), making them ‘suspicious strangers’ or directly as ‘disease-carriers’ (Devakumar et al., 2020). In fact, during the pandemic, there has been an increasing inability of children to meet their peers from different neighbourhoods or cities and from different social or cultural backgrounds, making them unable to share joyful and mutually enriching experiences and not allowing them to move past the racist stereotypes. This has been due to regional or local closures or limitations to mobility due to COVID-19. It is thus important to implement social and health interventions regarding the coexistence in diversity amid the COVID-19 crisis, with appropriate training of health professionals, to counter any potential exclusionary or even xenophobic situations amid the COVID-19 pandemic (Cholera et al., 2020) and the recurrent state of alarm raised by constant fake news emerging from the social media and political actors.

Given that the burden of racism is an additional problem suffered by women and girls from these racialised communities, it is especially important to stress an intersectional approach/analysis when attempting to understand the impact of health inequalities (such as this COVID-19 crisis) upon specific communities that are at risk of vulnerability due to their racialised background.

INTERMEDIARY DETERMINANTS

As reflected in Figure 1, beyond the structural determinants mentioned above, there are intermediary determinants that are likely influencing children's health and wellbeing during the COVID-19 crisis. Namely, family households and circumstances closely related to social environments and networks, as well as neighbourhoods, schooling and other pedagogical institutions, and also digital social media realities that have already developed an independent life of their own in the digital world.

Family and household circumstances

It is important to consider how families and households all over the world have been suffering from emotional distress and a sense of vulnerability during the pandemic (Conlon et al., 2021; de Figueiredo et al., 2021), since they have been faced with limited capacity to plan their future and fear for their health and that of their families as well as for their present jobs. Most parents and carers do their best to provide children with a warm and affectionate environment in which they may be able to continue learning as well as being occupied with positive experiences. However, not all children's family and home environments are equally positive nor are all parents or carers equally capable, or have sufficient time or resources, to dedicate their time to the children's educational and emotional needs and routines required for the development of autonomy, self-assurance and emotional stability. In addition, if the parents or carers are frequently stressed, suffer from tiredness or depression and are unable to fulfil their parental responsibilities, their children will be more prone to accidents (The Alliance for Child Protection in Humanitarian Action, 2018, 2019). Moreover, exposure to socioeconomically and emotionally 'unstable' home environments can shape a child's ability to self-regulate emotions. Evidence shows that situations of emotional conflict, fear of loss, lack of regular habits or routines and lack of sleep due to emotional distress, for example, may produce negative effects, such as cognitive impairment or other developmental, psychophysical or psychosocial problems (Irwin et al., 2007; OECD, 2020; Ramchandani, 2020; Ruiz, 2013; The Alliance for Child Protection in Humanitarian Action, 2018; United Nations, 2020a; World Health Organization. Regional Office for Europe, 2019).

Evidence from past epidemiological and economic crises (OECD, 2020; Save the Children, 2020; The Alliance for Child Protection in Humanitarian Action, 2018) and new evidence on the current COVID-19 crisis (The Alliance for Child Protection in Humanitarian Action, 2019; United Nations, 2020a), make it clear that children will suffer unavoidably from a disruption of their daily routines and their social life outside the household settings, will face a sense of sadness and isolation, as well as other psychological disturbances that will affect them in an enduring manner (de Figueiredo et al., 2021; Leigh-Hunt et al., 2017; Ramchandani, 2020; Tang et al., 2021; The Lancet Psychiatry, 2020).

On the other hand, housing conditions, such as overcrowding, reduced housing dimensions, increased housing costs or deficient kitchen and plumbing facilities, could also have had an impact on children's health during the COVID-19 pandemic and its lockdown measures. In fact, recent evidence shows that households with poor housing conditions have a 50% higher risk of COVID-19 incidence and a 42% higher risk of COVID-19 mortality, since overcrowding and the lack of access to adequate plumbing and sanitation are the factors of poor housing that mainly explain this (Ahmad et al., 2020). Furthermore, poor housing conditions have also been associated with an increased risk of symptoms of depression (e.g., greater severity of anxiety, impulsiveness and sleep symptomatology) during lockdowns, especially in those living in small houses with poor views and scarce indoor quality (Amerio et al., 2020).

Schools and nurseries

According to UNESCO data, during 2020 more than 89% of children worldwide stopped attending schools and nurseries (Save the Children, 2020). During the initial stage, teachers and educators tried to continue with their pedagogical roles via online meetings and distance learning and many classes were given in this online format. When deciding about whether to allow children to be taken out of nurseries and schools, recommendations should consider not only the biological dimension of the pandemic for children but also the cultural, emotional and social ones. The consequences of not doing so might have a negative impact on children's overall development.

Being able to go to schools or nurseries allows children to experience other contexts outside of those provided to them in their home environment, and their developmental, social, emotional and cognitive needs can be specifically taken care of as well as being exposed to potentially new cultural referents and values for learning (Frabboni, 2006). For example, children may have access to alternative referents such as female educators and experts in science or male educators adopting a role different to that which might be experienced in some households. They can also find other learning materials or opportunities chosen with pedagogical criteria while taking into account the developmental processes of children as well (Wild, 2003). Such complementary and enriching environments may provide children with the opportunity to see the world from a different or complementary perspective than the one they have in their homes.

Schools and nurseries can also be places for key peer-to-peer and other forms of social interactions, where communication, social meanings and imageries can and should be worked on, reworked and even contested on pedagogical grounds and where symbolic communication and learning should be more inclusive, empathetic and context sensitive. This can be done through critical discussion or by confronting children with other sources and options or situations that could allow them to see the world in a more open or critical manner, where symbols could actually be contested, discussed and interpreted differently (or complementary to) from those provided in different daily environments.

Based on the current knowledge of children's learning and developmental processes, it is likely that within the so-called 'new normality' and the new COVID-19 waves leading to new or enforced restrictions and rules, there is the risk of a progressive erosion of pedagogical values that promote the autonomous behaviour of children in schools and nurseries. During the COVID-19 emergency crisis, biomedical criteria were coherently prioritised over pedagogical criteria that conflicted with the new regulations (CDC, 2020; European Centre for Disease Prevention Control (ECDC), 2021; Van der Graaf et al., 2021) (for example, by limiting the access and social interactions with families inside the nurseries and schools or by establishing separations between

children of different age groups). The European Commission denounced that the measures undertaken in pedagogical settings against the pandemic put emphasis on the biomedical and 'babysitting' aspect of nurseries and schools to cover the labour market crisis over their central pedagogical role for learning and inclusion (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2021, p. 12). This change in the priority of biomedical decisions over pedagogical ones, once the pandemic emergency has passed, should be reconsidered or closely renegotiated with families, children and stakeholders (Van der Graaf et al., 2021). Otherwise, the internalisation of the COVID-19 regulations as regular ones can lead to a risk of regression in pedagogical methods mirroring the past in which the role of sanitary care in early childhood education was the central aim rather than the role of education and the development of autonomy in children (European Commission, Directorate-General for Education, Youth, Sport and Culture, 2021). Moreover, the fear of breaking the rules, the enforcement of guidelines and controlled behaviours or of enclosed spaces and controlled activities, can lead children to become more dependent upon the educators' decisions.

It is important to remember that schools and nurseries are not only places for children to learn and socialise, they are also places where families/households (and especially mothers) can receive support from peers and from the educators. Places where the construction of informal support networks for those who require social recognition, sorority reliance and pedagogical accompaniment by their peers can be constructed and reinforced. The periodical closure of schools has also involved the practical disappearance of some of the safety nets of support for children, especially those from vulnerable backgrounds, leading to some of them even slipping through this safety net (Conlon et al., 2021).

Social environment and neighbourhoods

Due to COVID-19-related social distancing measures, such as closure of places of work, learning, leisure and consumption, limiting our use of (public and private) space, we have been experiencing our neighbourhoods in new and different ways. As such, a new '*proxemics*' has developed, that is, a new understanding of the relationship and distance humans need due to the new social 'sociable spaces' has formed which in turn determines the formation of new behaviours (Mehta, 2020).

Public spaces serve different purposes for different socio-demographic groups and residents (Anguelovski et al., 2020). For children, for example, they can mediate positive behaviours that facilitate health and early development (e.g., play/recreation, physical activity, socialisation/social interactions, exploration and stimulation) (Christian et al., 2015; Honey-Rosés et al., 2021). It will be necessary to assess the territorial specificities and differences in mobility or access to certain public services, networks and outdoor spaces that different residents from different social groups have, both within the same neighbourhood and between different neighbourhoods, across different periods of time, and how this may affect their health, wellbeing, perceptions, use and relationships with public spaces (Honey-Rosés et al., 2021).

Children are active cultural social actors, deeply dependent upon their peers and their social and material environments (Bronfenbrenner, 1987; Crowley, 2017; OECD, 2020; The Alliance for Child Protection in Humanitarian Action, 2019; Tizard & Hughes, 1984; World Health Organization & Department of Child and Adolescent Health and Development, 2004), which include sets of values, ideas, symbols, expectations from (and fears of) their sociocultural environments (Dahlberg et al., 2020; Steinberg & Kincheloe, 2019), and are capable

of active and creative symbolic and cultural communication. As such, children require nourishing socializing environments where they can learn from others, allowing them to grow and thrive in a stable emotional and physical environment, to ensure that their biological, physiological, social and emotional needs are taken care of (Bronfenbrenner, 1987; Dewey, 2004; Frabboni, 2006; Lipman et al., 2002). Children's social ecosystems are therefore central to their development (Bronfenbrenner, 1987; Gupta & Jawanda, 2020; Irwin et al., 2007) and any effect upon these local ecosystems will trigger rippling effects and can destabilise the protective home environments constructed by their families and surrounding communities, resulting in both direct effects and long-term implications for their physical, cognitive and emotional development (Conlon et al., 2021; de Figueiredo et al., 2021; World Health Organization & Department of Child and Adolescent Health and Development, 2004). Given the above, it is important to take into account the territorial differences in mobility or access to certain services of networks, to better understand how territorial specificities affect children differently, especially with a view to intersectional understanding of its impact depending on their socioeconomic context, ethnic group and/or gender (amongst other social dimensions).

In addition, not everyone has access to safe local green spaces and quality air, which can affect a person's health and wellbeing and represent socio-environmental injustice at the neighbourhood level. With regard to the data collected, the COVID-19-related mobility restrictions have meant that during 2020 less time was spent doing physical exercise outside (and thus less time for healthy activities) leading to more sedentary activities (and unhealthy behaviour linked to obesity), potentially resulting later in lack of self-esteem, increase in adiposity, cardiovascular risks, respiratory infections, poorer sleep and other potentially negative outcomes (The Lancet Psychiatry, 2020; World Health Organization. Regional Office for Europe, 2019). This has likely been linked to the poor neighbourhood conditions (including multi-generational or crowded households) and pre-existing environmental and geographic inequalities (Kim & Bostwick, 2020; Tsai, 2021). Not everyone has had access to safe local green spaces and quality air, which can affect their wellbeing and quality of life (Laster Pirtle, 2020). This has likely been exacerbated over the past year.

Previous research showing connections between atmospheric pollution and health inequalities (Lemkow & Espluga, 2017; Rodríguez & Lemkow, 1990) provides empirical support for more recent research that finds correlations between atmospheric pollution and COVID-19 incidence, showing how COVID-19 could have a major impact on those affected by environmental stressors and atmospheric pollution which is proved by significant statistical data (Barouki et al., 2021; Comunian et al., 2020; Nazroo et al., 2020; Shakil et al., 2020). Given these results, it is important to raise awareness of how these environmental stressors and pollution, especially significant in areas with low air quality, might affect children from vulnerable backgrounds already at higher risk of suffering from COVID-19 or its logistical effects.

In fact, because not all children are able to spend their time walking or playing in a garden or in a safe community park, we must use this as a reminder that with social injustice existing in segregated areas or neighbourhoods comes environmental injustice too: less air quality, more pollutants, fewer green spaces that affect the children's as well as adults wellbeing and quality of life (Laster Pirtle, 2020). If children cannot remain active in healthy open environments for long periods due to the neighbourhood conditions, alternatives should be provided and political measures should be taken to allow children from different backgrounds to have access to an active (non-sedentary) life, especially in natural or non-polluted environments with access to sunlight and green spaces (de Figueiredo et al., 2021), beyond the house and local premises, by taking them to safe parks, mountains, the forests or to the beach (Honey-Rosés et al., 2021).

In some ways, COVID-19 has helped to re-emphasise the importance of integrating a public health perspective and focussing more broadly on salutogenesis within urban planning, to create healthier and more just and sustainable cities (Honey-Rosés et al., 2021).

Media and digital resources

Since the start of the pandemic, an increase in access to TV and digital media has been detected in several studies (OECD, 2020; Vivek, 2020). Increased use of social media and technological devices can increase the risk of high exposure to dangerous and toxic virtual environments and content (de Figueiredo et al., 2021; Gupta & Jawanda, 2020; OECD, 2020; Tasnim et al., 2020; United Nations, 2020a). Meanwhile, these devices and electronic resources may provide easy access to useful information, particularly for children who are being homeschooled; they can also lead to the development of addictive behaviours, emotional conditioning (Inter-Agency Standing Committee (IASC), 2020; Kramer et al., 2014) or even to the consumption and spreading of online racist attitudes and messages (Cheng & Conca-Cheng, 2020; Elias et al., 2021; Karalis Noel, 2020; Wang et al., 2021). Some recent studies show that during the pandemic, fake news has spread easily, as some technological devices and social media are acting as *echo chambers* as it were, thus being able to multiply a lie, convincing some sections of the public, and their families, of its (fake) truthfulness, which has quickly created social alarm and psychosocial stress (Elias et al., 2021; Gao et al., 2020; Karalis Noel, 2020).

In addition, several previous reports have indicated that the use of electronic devices without parental guidance put children at a risk of exposing themselves to sexual predators or gender-based violence, abuse, cyberviolence (Save the Children, 2020; UN WOMEN, 2020; United Nations, 2020a) and other forms of gender and sexual stereotyping (OECD, 2020) as children spend more hours willing to present themselves showing off or willing to be accepted in front of their (supposed) peers.

Another health-related behaviour that has been affected during the COVID-19 pandemic, especially connected with the use of TV and other electronic devices, are eating habits. Although further studies are still needed, international organisations point out that this crisis could increase the risk of paediatric obesity in middle- and high-income countries, and an increase in paediatric undernutrition is expected in low-income countries (Zemrani et al., 2021). These changes in nutritional habits could lead to additional child deaths (increased risk of infectious disease in wasted children and of non-communicable diseases in obese children) and also long-term effects, since early childhood is a period for learning healthy eating habits and inadequate nutrition could have repercussions in adulthood (Zemrani et al., 2021). In addition, the inequalities in relation to children's eating habits do not only occur between countries but also within them. In this sense, a recent study carried out in Catalonia (Spain) showed that confinement due to COVID-19 has increased fruit consumption in high-school students, but it has also increased snacking between meals (Aguilar-Martínez et al., 2021). However, when eating habits were compared according to the perceived socioeconomic position of the students, it was observed that students with the most disadvantaged socioeconomic situation had a greater risk of worsening their diet and dietary patterns as compared to the students with more advantageous socioeconomic situations (Aguilar-Martínez et al., 2021).

CONCLUDING REMARKS

Collectively, our review shows that the COVID-19 pandemic, beyond positioning children in a physical, psychological and emotional situation of vulnerability, might also place them in a state of symbolic hermeneutical vulnerability. That is to say, a situation of vulnerability about how to deal with, interpret and internalise elements of symbolic cultural and social interpretation that may portray discriminatory aspects of entire communities, in terms of the construction and reconstructions of world-views through the use of biased–discriminatory world-view interpretations (racist and/or sexist), symbolic violence or stereotypical portrayals of the other in daily social interactions.

As such, to ensure a deeper and comprehensive analysis of the short-, mid- and long-term impact of the multidimensional COVID-19 crisis on children's health and wellbeing, an intersectional dynamic approach must be applied. This analysis must consider and critically reflect on the multiple overlapping axes of inequalities and multi-layered power structures and processes that affect children in systemically different ways depending on their families' and context-based social groups. Therefore, in the design and implementation of health measures to face the current COVID-19 pandemic (and possible future pandemics and crises), the different social determinants of health and the intersectionality between them should be considered, to take equitable actions to mitigate or halt the social inequalities in health that already exist in our current societies, with the view to also address those affecting children, especially those affected by racial or gender discriminations. Adopting this perspective requires coordinated and real transdisciplinary work between different areas such as health, social services, housing, education and urban planning among others.

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Gabriel Lemkow-Tovías: Conceptualization (Lead); Writing – original draft (Lead); Writing – review & editing (Equal). **Louis Lemkow:** Conceptualization (Supporting); Writing – review & editing (Equal). **Lucinda Cash-Gibson:** Writing – original draft (Supporting); Writing – review & editing (Equal). **Ester Teixidó-Compañó:** Writing – original draft (Supporting); Writing – review & editing (Equal). **Joan Benach:** Writing – review & editing (Equal).

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The authors confirm the absence of shared data for the elaboration of this article.

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REFERENCES

- Agénor, M. (2020). Future directions for incorporating intersectionality into quantitative population health research. *American Journal of Public Health, 110*(6), 803–806. <https://doi.org/10.2105/AJPH.2020.305610>
- Aguilar-Martínez, A., Bosque-Prous, M., González-Casals, H., Colillas-Malet, E., Puigcorbé, S., Esquiús, L., & Espelt, A. (2021). Social inequalities in changes in diet in adolescents during confinement due to COVID-19 in Spain: The DESKcohort project. *Nutrients, 13*(5), 1577. <https://doi.org/10.3390/nu13051577>
- Ahmad, K., Erqou, S., Shah, N., Nazir, U., Morrison, A. R., Choudhary, G., & Wu, W.-C. (2020). Association of poor housing conditions with COVID-19 incidence and mortality across US counties. *PLoS One, 15*(11), e0241327. <https://doi.org/10.1371/journal.pone.0241327>
- Amerio, A., Brambilla, A., Morganti, A., Aguglia, A., Bianchi, D., Santi, F., Costantini, L., Odone, A., Costanza, A., Signorelli, C., Serafini, G., Amore, M., & Capolongo, S. (2020). COVID-19 lockdown: Housing built environment's effects on mental health. *International Journal of Environmental Research and Public Health, 17*(16), 5973. <https://doi.org/10.3390/ijerph17165973>
- Anguelovski, I., Brand, A. L., Connolly, J. J. T., Corbera, E., Kotsila, P., Steil, J., Garcia-Lamarca, M., Triguero-Mas, M., Cole, H., Baró, F., Langemeyer, J., del Pulgar, C. P., Shokry, G., Sekulova, F., & Argüelles Ramos, L. (2020). Expanding the boundaries of justice in urban greening scholarship: Toward an emancipatory, antisubordination, intersectional, and relational approach. *Annals of the Association of American Geographers, 110*(6), 1743–1769. <https://doi.org/10.1080/24694452.2020.1740579>
- Arcaya, M. C., Arcaya, A. L., & Subramanian, S. V. (2015). Inequalities in health: Definitions, concepts, and theories. *Global Health Action, 8*(1), 27106. <https://doi.org/10.3402/gha.v8.27106>
- Bambra, C., Albani, V., & Franklin, P. (2021). COVID-19 and the gender health paradox. *Scandinavian Journal of Public Health, 49*(1), 17–26. <https://doi.org/10.1177/1403494820975604>
- Bambra, C., Riordan, R., Ford, J., & Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *Journal of Epidemiology & Community Health, 74*(11), 964–968. <https://doi.org/10.1136/jech-2020-214401>
- Barouki, R., Kogevinas, M., Audouze, K., Belesova, K., Bergman, A., Birnbaum, L., Boekhold, S., Denys, S., Deseille, C., Drakvik, E., Frumkin, H., Garric, J., Destoumieux-Garzon, D., Haines, A., Huss, A., Jensen, G., Karakitsios, S., Klanova, J., Koskela, I.-M., ... HERA-COVID-19 working group. (2021). The COVID-19 pandemic and global environmental change: Emerging research needs. *Environment International, 146*, 106272. <https://doi.org/10.1016/j.envint.2020.106272>
- Bécares, L., Nazroo, J., & Kelly, Y. (2015). A longitudinal examination of maternal, family, and area-level experiences of racism on children's socioemotional development: Patterns and possible explanations. *Social Science & Medicine, 142*, 128–135. <https://doi.org/10.1016/j.socscimed.2015.08.025>
- Benach, J. (2021). We must take advantage of this pandemic to make a radical social change: The coronavirus as a global health, inequality, and eco-social problem. *International Journal of Health Services: Planning, Administration, Evaluation, 51*(1), 50–54. <https://doi.org/10.1177/0020731420946594>
- Benach, J., Díaz, M. R., Muñoz, N. J., Martínez-Herrera, E., & Pericàs, J. M. (2019). What the Puerto Rican hurricanes make visible: Chronicle of a public health disaster foretold. *Social Science & Medicine, 238*, 112367. <https://doi.org/10.1016/j.socscimed.2019.112367>
- Bronfenbrenner, U. (1987). *La ecología del desarrollo humano (1a)*. Paidós.
- Cash-Gibson, L., Pericàs, J. M., Martínez-Herrera, E., & Benach, J. (2021). Health inequalities in the time of COVID-19: The globally reinforcing need to strengthen health inequalities research capacities. *International Journal of Health Services: Planning, Administration, Evaluation, 51*(3), 300–304. <https://doi.org/10.1177/0020731421993939>
- CDC. (2020, February 11). *Community, work, and school*. Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-childcare-guidance.html>

- Chaudhuri, M. (2021). COVID-19 and structural inequalities: Some reflections on the practice of sociology. *Sociological Bulletin*, 70(2), 252–258. <https://doi.org/10.1177/0038022921994977>
- Chaudhury, S. (2021). Anthropology of Covid-19: Some narratives. *The Eastern Anthropologist*, 74(2–3), 175–185.
- Cheah, C. S. L., Wang, C., Ren, H., Zong, X., Cho, H. S., & Xue, X. (2020). COVID-19 Racism and mental health in Chinese American families. *Pediatrics*, 146(5), e2020021816. <https://doi.org/10.1542/peds.2020-021816>
- Cheng, T. L., & Conca-Cheng, A. M. (2020). The pandemics of racism and COVID-19: Danger and opportunity. *Pediatrics*, 146(5), e2020024836. <https://doi.org/10.1542/peds.2020-024836>
- Cholera, R., Falusi, O. O., & Linton, J. M. (2020). Sheltering in place in a xenophobic climate: COVID-19 and children in immigrant families. *Pediatrics*, 146(1), e20201094. <https://doi.org/10.1542/peds.2020-1094>
- Christian, H., Zubrick, S. R., Foster, S., Giles-Corti, B., Bull, F., Wood, L., Knuiman, M., Brinkman, S., Houghton, S., & Boruff, B. (2015). The influence of the neighborhood physical environment on early child health and development: A review and call for research. *Health & Place*, 33, 25–36. <https://doi.org/10.1016/j.healthplace.2015.01.005>
- Comisión Para Reducir Las Desigualdades Sociales En Salud En España. (2012). [A proposal of policies and interventions to reduce social inequalities in health in Spain. Commission to Reduce Social Inequalities in Health in Spain]. *Gaceta Sanitaria / S.E.S.P.A.S*, 26(2), 182–189. <https://doi.org/10.1016/j.gaceta.2011.07.024>
- Comunian, S., Dongo, D., Milani, C., & Palestini, P. (2020). Air pollution and COVID-19: The role of particulate matter in the spread and increase of COVID-19's morbidity and mortality. *International Journal of Environmental Research and Public Health*, 17(12), 4487. <https://doi.org/10.3390/ijerph17124487>
- Conlon, C., McDonnell, T., Barrett, M., Cummins, F., Deasy, C., Hensey, C., McAuliffe, E., & Nicholson, E. (2021). The impact of the COVID-19 pandemic on child health and the provision of care in paediatric emergency departments: A qualitative study of frontline emergency care staff. *BMC Health Services Research*, 21(1), 279. <https://doi.org/10.1186/s12913-021-06284-9>
- Crowley, K. (2017). *Child development: A practical introduction (2a)*. SAGE Publications.
- Dahlberg, G., Moss, P., & Pence, A. (2020). *Más allá de la calidad en educación Infantil*. Graó.
- de Figueiredo, C. S., Sandre, P. C., Portugal, L. C. L., Mázala-de-Oliveira, T., da Silva Chagas, L., Raony, Í., Ferreira, E. S., Giestal-de-Araújo, E., dos Santos, A. A., & Bomfim, P. O.-S. (2021). COVID-19 pandemic impact on children and adolescents' mental health: Biological, environmental, and social factors. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 106, 110171. <https://doi.org/10.1016/j.pnpbp.2020.110171>
- De Paz, C., Munoz Boudet, A. M., & Gaddis, I. (2020). *Gender dimensions of the COVID-19 pandemic*. World Bank Group. <https://openknowledge.worldbank.org/bitstream/handle/10986/33622/Gender-Dimensions-of-the-COVID-19-Pandemic.pdf?sequence=1%26isAllowed=y>
- Devakumar, D., Shannon, G., Bhopal, S. S., & Abubakar, I. (2020). Racism and discrimination in COVID-19 responses. *The Lancet*, 395(10231), 1194. [https://doi.org/10.1016/S0140-6736\(20\)30792-3](https://doi.org/10.1016/S0140-6736(20)30792-3)
- Dewey, J. (2004). *Democracia y educación*. Morata.
- ECRI Secretariat; Directorate General II - Democracy, Council of Europe, & ECRI Secretariat. (2017). *Annual report on ECRI'S activities. Covering the period from 1 January to 31 December 2016*. <https://rm.coe.int/annual-report-on-ecri-s-activities-covering-the-period-from-1-january-/16808ae6d6>
- Elias, A., Ben, J., Mansouri, F., & Paradies, Y. (2021). Racism and nationalism during and beyond the COVID-19 pandemic. *Ethnic and Racial Studies*, 44(5), 783–793. <https://doi.org/10.1080/01419870.2020.1851382>
- European Commission, Directorate-General for Education, Youth, Sport and Culture, J. (2021). *Early childhood education and care and the Covid-19 pandemic: Understanding and managing the impact of the crisis on the sector*. Oficina de Publicaciones de la Unión Europea. <https://data.europa.eu/doi/10.2766/60724>
- European Centre for Disease Prevention Control (ECDC). (2021). *COVID-19 in children and the role of school settings in transmission—second update*. <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-in-children-and-the-role-of-school-settings-in-transmission-second-update.pdf>
- Fore, H. H. (2020). A wake-up call: COVID-19 and its impact on children's health and wellbeing. *Lancet Global Health*, 8(7), e861–e862. [https://doi.org/10.1016/S2214-109X\(20\)30238-2](https://doi.org/10.1016/S2214-109X(20)30238-2)
- Frabboni, F. (2006). *El libro de la pedagogía y la didáctica. II. Lugares y tiempos de la educación* (1a ed.). Popular.
- Gao, J., Zheng, P., Jia, Y., Chen, H., Mao, Y., Chen, S., Wang, Y., Fu, H., & Dai, J. (2020). Mental health problems and social media exposure during COVID-19 outbreak. *PLoS One*, 15(4), e0231924. <https://doi.org/10.1371/journal.pone.0231924>

- Gee, G. C., Walsemann, K. M., & Brondolo, E. (2012). A life course perspective on how racism may be related to health inequities. *American Journal of Public Health, 102*(5), 967–974. <https://doi.org/10.2105/AJPH.2012.300666>
- Gupta, S., & Jawanda, M. K. (2020). The impacts of COVID-19 on children. *Acta Paediatrica, 109*(11), 2181–2183. <https://doi.org/10.1111/apa.15484>
- Hall, K. S., Samari, G., Garbers, S., Casey, S. E., Diallo, D. D., Orcutt, M., Moresky, R. T., Martinez, M. E., & McGovern, T. (2020). Centring sexual and reproductive health and justice in the global COVID-19 response. *The Lancet, 395*(10231), 1175–1177. [https://doi.org/10.1016/S0140-6736\(20\)30801-1](https://doi.org/10.1016/S0140-6736(20)30801-1)
- Hankivsky, O., Grace, D., Hunting, G., Giesbrecht, M., Fridkin, A., Rudrum, S., Ferlatte, O., & Clark, N. (2014). An intersectionality-based policy analysis framework: Critical reflections on a methodology for advancing equity. *International Journal for Equity in Health, 13*(1), 119. <https://doi.org/10.1186/s12939-014-0119-x>
- Honey-Rosés, J., Anguelovski, I., Chireh, V. K., Daher, C., Konijnendijk van den Bosch, C., Litt, J. S., Mawani, V., McCall, M. K., Orellana, A., Oscilowicz, E., Sánchez, U., Senbel, M., Tan, X., Villagomez, E., Zapata, O., & Nieuwenhuijsen, M. J. (2021). The impact of COVID-19 on public space: An early review of the emerging questions – design, perceptions and inequities. *Cities & Health, 5*(sup1), S263–S279. <https://doi.org/10.1080/23748834.2020.1780074>
- Intern-Agency Standig Committee (IASC). (2020). *Addressing mental health and psychosocial aspects of COVID-19 outbreak*.
- Irwin, L. G., Siddiqi, A., & Hertzman, C. (2007). *Early child development: A powerful equalizer*. Final report. https://www.who.int/social_determinants/resources/ecd_kn_report_07_2007.pdf
- Kapilashrami, A., & Hankivsky, O. (2018). Intersectionality and why it matters to global health. *Lancet (London, England), 391*(10140), 2589–2591. [https://doi.org/10.1016/S0140-6736\(18\)31431-4](https://doi.org/10.1016/S0140-6736(18)31431-4)
- Karalis Noel, T. (2020). Conflating culture with COVID-19: Xenophobic repercussions of a global pandemic. *Social Sciences & Humanities Open, 2*(1), 100044. <https://doi.org/10.1016/j.ssaho.2020.100044>
- Kim, S. J., & Bostwick, W. (2020). Social vulnerability and racial inequality in COVID-19 deaths in Chicago. *Health Education & Behavior, 47*(4), 509–513. <https://doi.org/10.1177/1090198120929677>
- Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences, 111*(24), 8788–8790. <https://doi.org/10.1073/pnas.1320040111>
- Laster Pirtle, W. N. (2020). Racial capitalism: A fundamental cause of novel coronavirus (COVID-19) pandemic inequities in the United States. *Health Education & Behavior, 47*(4), 504–508. <https://doi.org/10.1177/1090198120922942>
- Leigh-Hunt, N., Bagguley, D., Bash, K., Turner, V., Turnbull, S., Valtorta, N., & Caan, W. (2017). An overview of systematic reviews on the public health consequences of social isolation and loneliness. *Public Health, 152*, 157–171. <https://doi.org/10.1016/j.puhe.2017.07.035>
- Lemkow, L., & Espluga, J. (2017). *Sociología ambiental. Pensamiento socioambiental y ecología social del riesgo*. Icaria.
- Lemkow, L., & Lemkow-Tovías, G. (2021). Desigualtats de salut en temps de Covid-19 i crisi climàtica. *Eines, 40*, 7–17.
- Lipman, M., Oscanyan, P., & Sharp, A. M. (2002). *La filosofía en el aula (3a)*. Ediciones de la Torre.
- Logie, C. H., & Turan, J. M. (2020). How do we balance tensions between COVID-19 public health responses and stigma mitigation? Learning from HIV research. *AIDS and Behavior, 24*(7), 2003–2006. <https://doi.org/10.1007/s10461-020-02856-8>
- Lokot, M., & Avakyan, Y. (2020). Intersectionality as a lens to the COVID-19 pandemic: Implications for sexual and reproductive health in development and humanitarian contexts. *Sexual and Reproductive Health Matters, 28*(1), 1764748. <https://doi.org/10.1080/26410397.2020.1764748>
- Marmot, M., Allen, J., Goldblatt, P., Boyce, T., & McNeish, D. (2010). *Fair society, healthy lives. The marmot review: Strategic review of health inequalities in England post-2010*. <https://www.artshhealthresources.org.uk/docs/fair-society-healthy-lives-the-marmot-review/>
- Marron, J. M. (2021). Structural racism in the COVID-19 pandemic: Don't forget about the children! *The American Journal of Bioethics: AJOB, 21*(3), 94–97. <https://doi.org/10.1080/15265161.2020.1871114>
- Mehta, V. (2020). The new proxemics: COVID-19, social distancing, and sociable space. *Journal of Urban Design, 25*(6), 669–674. <https://doi.org/10.1080/13574809.2020.1785283>

- Milne, A. (2020, April 9). UK under fire for suggesting coronavirus 'great leveller'. *Reuters*. <https://www.reuters.com/article/us-health-coronavirus-leveller-trfn-idUSKCN21R30P>
- Nazroo, P. J., Murray, K., Taylor, H., Bécarea, D. L., Field, Y., Kapadia, D. D., & Rolston, D. Y. (2020). *Rapid evidence review: Inequalities in relation to COVID-19 and their effects on London*. 80.
- OECD. (2020). *Combating COVID-19's effect on children*. 40.
- OECD. (2021). *Towards gender-inclusive recovery*. OECD. <https://doi.org/10.1787/ab597807-en>
- Park, C.-Y., & Inocencio, A. M. (2020). *COVID-19 is No excuse to regress on gender equality*. (0 ed., ADB Briefs) [ADB Briefs]. Asian Development Bank. <https://doi.org/10.22617/BRF200317-2>
- Patnaik, S. M. (2021). Managing the COVID-19 pandemic in odisha: Anthropological reflections. *The Eastern Anthropologist*, 74(2-3), 159-171.
- Peterman, A., & O'Donnell, M. (2020). *COVID-19 and violence against women and children*. 11.
- Pietrobelli, A., Pecoraro, L., Ferruzzi, A., Heo, M., Faith, M., Zoller, T., Antoniazzi, F., Piacentini, G., Fearnbach, S. N., & Heymsfield, S. B. (2020). Effects of COVID-19 lockdown on lifestyle behaviors in children with obesity living in Verona, Italy: A longitudinal study. *Obesity*, 28(8), 1382-1385. <https://doi.org/10.1002/oby.22861>
- Ramchandani, P. (2020). Children and covid-19. *New Scientist*, 246(3277), 21. [https://doi.org/10.1016/S0262-4079\(20\)30721-1](https://doi.org/10.1016/S0262-4079(20)30721-1)
- Raworth, K. (2017). A doughnut for the anthropocene: Humanity's compass in the 21st century. *The Lancet Planetary Health*, 1(2), e48-e49. [https://doi.org/10.1016/S2542-5196\(17\)30028-1](https://doi.org/10.1016/S2542-5196(17)30028-1)
- Rodríguez, J. A., & Lemkow, L. (1990). Health and social inequities in Spain. *Social Science & Medicine*, 31(3), 351-358. [https://doi.org/10.1016/0277-9536\(90\)90282-w](https://doi.org/10.1016/0277-9536(90)90282-w)
- Ruiz, A. (2013). *Pediatrics en ciencias de la salud*. Universidad de Granada.
- Sabatello, M., Jackson Scroggins, M., Goto, G., Santiago, A., McCormick, A., Morris, K. J., Daulton, C. R., Easter, C. L., & Darien, G. (2021). Structural racism in the COVID-19 pandemic: Moving forward. *The American Journal of Bioethics: AJOB*, 21(3), 56-74. <https://doi.org/10.1080/15265161.2020.1851808>
- Salasan Consulting Inc. (2020). *Addressing gendered on sequences of COVID-19 in education and training*. Commonwealth of Learning. http://oasis.col.org/bitstream/handle/11599/3725/2020_Salasan_Gendered_Consequences_COVID.pdf?sequence=1%26isAllowed=y
- Save the Children. (2020). *Adolescent girls and COVID-19: GBV risks and response*. <https://socialprotection.org/es/discover/publications/adolescent-girls-and-covid-19-gbv-risks-and-response>
- Shakil, M. H., Munim, Z. H., Tasnia, M., & Sarowar, S. (2020). COVID-19 and the environment: A critical review and research agenda. *Science of the Total Environment*, 745, 141022. <https://doi.org/10.1016/j.scitotenv.2020.141022>
- Steinberg, S., & Kincheloe, J. L. (2019). *Cultura infantil y multinacionales (2a)*. Morata.
- Tang, S., Xiang, M., Cheung, T., & Xiang, Y.-T. (2021). Mental health and its correlates among children and adolescents during COVID-19 school closure: The importance of parent-child discussion. *Journal of Affective Disorders*, 279, 353-360. <https://doi.org/10.1016/j.jad.2020.10.016>
- Tasnim, S., Hossain, M. M., & Mazumder, H. (2020). Impact of rumors or misinformation on coronavirus disease (COVID-19) in social media. In *SocArXiv* (No. uf3zn; SocArXiv). Center for Open Science. <https://ideas.repec.org/p/osf/socarx/uf3zn.html>
- The Alliance for Child Protection in Humanitarian Action. (2018). *Guidance note: Protection of children during infectious disease outbreaks*. https://alliancecpha.org/en/system/tdf/library/attachments/cp_during_ido_guide_0.pdf?file=1%26type=node%26id=37715
- The Alliance for Child Protection in Humanitarian Action. (2019). *Technical note: Protection of children during the coronavirus pandemic v.2*. 21.
- The Lancet Psychiatry, null. (2020). Isolation and inclusion. *The Lancet Psychiatry*, 7(5), 371. [https://doi.org/10.1016/S2215-0366\(20\)30156-5](https://doi.org/10.1016/S2215-0366(20)30156-5)
- Tizard, B., & Hughes, M. (1984). *Young children learning: Talking and thinking at home and at school*. Fontana Press.
- Tsai, J. (2021). COVID-19 is not a story of race, but a record of racism-our scholarship should reflect that reality. *The American Journal of Bioethics: AJOB*, 21(2), 43-47. <https://doi.org/10.1080/15265161.2020.1861377>
- UNICEF. (n.d.). *Five actions for gender equality in the COVID-19 response*.
- United Nations. (2020a). *Policy brief: The impact of COVID-19 on children*. https://www.un.org/sites/un2.un.org/files/policy_brief_on_covid_impact_on_children_16_april_2020.pdf

- United Nations. (2020b). *Policy brief: The impact of COVID-19 on women*. United Nations Entity for Gender Equality and the Empowerment of Women. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/policy-brief-the-impact-of-covid-19-on-women-en.pdf?la=en%26vs=1406>
- Unterhalter, E., North, A., Arnot, M., Lloyd, C., Moletsane, L., Murphy-Graham, E., Parkes, J., & Saito, M. (n.d.). *Interventions to enhance girls' education and gender equality*. *Education Rigorous Literature Review*. Department for International Development. <https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/Girls%20education%202014%20Unterhalter%20report.pdf?ver=2015-12-08-165815-117>
- UN & UNDP. (2021). *COVID-19 global gender response tracker. Factsheet: Europe, Northern America, Australia and New Zealand*. <https://data.unwomen.org/sites/default/files/documents/Publications/UNDP-UNWomen-COVID19-Tracker-Factsheet-1.pdf>
- UN WOMEN. (2020). *COVID-19 and ending violence against women and girls*. United Nations Entity for Gender Equality and the Empowerment of Women. <https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/issue-brief-covid-19-and-ending-violence-against-women-and-girls-en.pdf?la=en%26vs=5006>
- Van der Graaf, L., Dunajeva, J., Siarova, H., & Bankauskaite, R. (2021). *Education and youth in post-COVID-19 Europe – crisis effects and policy recommendations*. Research for CULT Committee.
- Virdee, S., & McGeever, B. (2018). Racism, crisis, Brexit. *Ethnic and Racial Studies*, 41(10), 1802–1819. <https://doi.org/10.1080/01419870.2017.1361544>
- Vivek, P. S. (2020). Diabolic contagion COVID-19: A socio-generic investigation in India. *The Eastern Anthropologist*, 73(3–4), 341–362.
- Wang, S., Chen, X., Li, Y., Luu, C., Yan, R., & Madrisotti, F. (2021). 'I'm more afraid of racism than of the virus!': Racism awareness and resistance among Chinese migrants and their descendants in France during the Covid-19 pandemic. *European Societies*, 23(sup1), S721–S742. <https://doi.org/10.1080/14616696.2020.1836384>
- Whitehead, M., & Dahlgren, G. (2006). *Concepts and principles for tackling social inequities in health*. WHO Regional Office for Europe.
- Wild, R. (2003). *Calidad de vida: Educación y respeto para el crecimiento interior de niños y adolescentes*. Herder.
- World Health Organization. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health: Commission on social determinants of health final report*. World Health Organization. https://books.google.es/books?hl=ca%26lr=%26id=zc_VfH7wfV8C%26oi=fnd%26pg=PA1%26dq=Commission+on+Social+Determinants+of+Health.+Closing+the+gap+in+a+generation:+health+equity+through+action+on+the+social+determinants+of+health.%26ots=4v5iDjVamE%26sig=IDDRnCV2frzibw-JG4X_wfKtPds
- World Health Organization & Department of Child and Adolescent Health and Development. (2004). *The importance of caregiver-child interactions for the survival and healthy development of young children: A review*. Dept. of Child and Adolescent Health and Development, World Health Organization.
- World Health Organization. Regional Office for Europe. (2019). *Guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age*. World Health Organization. Regional Office for Europe. <https://apps.who.int/iris/handle/10665/340892>
- 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 Journal for Equity in Health*, 20(1), 44. <https://doi.org/10.1186/s12939-021-01390-w>

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