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- 2 Nacheha JB, Grimwood A, Mahomed H, et al. From easing lockdowns to scaling up community-based coronavirus disease 2019 screening, testing, and contact tracing in Africa—shared approaches, innovations, and challenges to minimize morbidity and mortality. *Clin Infect Dis* 2021; **72**: 327–31.
- 3 Victora CG, Christian P, Vdaletti LP, Gatica-Dominguez G, Menon P, Black RE. Revisiting maternal and child undernutrition in low-income and middle-income countries: variable progress towards an unfinished agenda. *Lancet* 2021; published online March 7. [https://doi.org/10.1016/S0140-6736\(21\)00394-9](https://doi.org/10.1016/S0140-6736(21)00394-9).
- 4 Heidkamp RA, Piwoz E, Gillespie S, et al. Mobilising evidence, data, and resources to achieve global maternal and child undernutrition targets and the Sustainable Development Goals: an agenda for action. *Lancet* 2021; published online March 7. [https://doi.org/10.1016/S0140-6736\(21\)00568-7](https://doi.org/10.1016/S0140-6736(21)00568-7).
- 5 Leroy JL, Habicht JP, Pelto G, Bertozzi SM. Current priorities in health research funding and lack of impact on the number of child deaths per year. *Am J Public Health* 2007; **97**: 219–23.
- 6 Shekar M. Delivery sciences in nutrition. *Lancet* 2008; **371**: 1751.
- 7 Tulenko K, Møgedal S, Afzal MM, et al. Community health workers for universal health-care coverage: from fragmentation to synergy. *Bull World Health Organ* 2013; **91**: 847–52.
- 8 Heidkamp RA, Wilson E, Menon P, et al. How can we realise the full potential of health systems for nutrition? *BMJ* 2020; **368**: l6911.
- 9 Swaminathan S, Sheikh K, Marten R, et al. Embedded research to advance primary health care. *BMJ Global Health* 2020; **5**: e004684.
- 10 Government of Pakistan. The Ehsaas strategy. 2021. <https://www.pass.gov.pk/userfiles1/files/Ehsaas%20Strategy%20Post%20COVID%20February%207%202021.pdf> (accessed Feb 22, 2021).
- 11 Nishtar S. Ehsaas emergency cash, final report. Government of Pakistan, 2020. https://www.pass.gov.pk/Document/Downloads/Ehsaas%20Emergency%20Cash%20Report%20Oct%202020_Dec15_2020.pdf (accessed Feb 22, 2021).
- 12 Swinburn BA, Kraak VI, Allender S, et al. The global syndemic of obesity, undernutrition, and climate change: the Lancet Commission report. *Lancet* 2019; **393**: 791–846.
- 13 Willett W, Rockström J, Loken B, et al. Food in the Anthropocene: the EAT–Lancet Commission on healthy diets from sustainable food systems. *Lancet* 2019; **393**: 447–92.
- 14 Popkin BM, Du S, Green WD, et al. Individuals with obesity and COVID-19: a global perspective on the epidemiology and biological relationships. *Obesity Rev* 2020; **21**: e13128.
- 15 Nambiar R. How Rwanda is using drones to save millions of lives. CNBC, May 27, 2016. <https://www.cnbc.com/2016/05/27/how-rwanda-is-using-drones-to-save-millions-of-lives.html> (accessed Feb 10, 2021).
- 16 James N, Lawson K, Acharya Y. Evidence on result-based financing in maternal and child health in low-and middle-income countries: a systematic review. *Global Health Res Pol* 2020; **5**: 1–5.
- 17 Eichler R, Agarwal K, Askew I, Iriarte E, Morgan L, Watson J. Performance-based incentives to improve health status of mothers and newborns: what does the evidence show? *J Health Popul Nutr* 2013; **31** (suppl 2): 36–47.
- 18 Osendarp S, Akuoku J, Black R, et al. The potential impacts of the COVID-19 crisis on maternal and child undernutrition in low and middle income countries. *Research Square* 2020; published online Dec 11. <https://doi.org/10.21203/rs.3.rs-123716/v1> (preprint).
- 19 Shekar M, Kakietek J, Eberwein JD, Walters D. An investment framework for nutrition: reaching the global targets for stunting, anemia, breastfeeding, and wasting. Washington, DC: World Bank, 2017.

Triple jeopardy: disabled people and the COVID-19 pandemic



People with disabilities have been differentially affected by COVID-19 because of three factors: the increased risk of poor outcomes from the disease itself, reduced access to routine health care and rehabilitation, and the adverse social impacts of efforts to mitigate the pandemic. 10 years ago, WHO's *World Report on Disability* noted that people with disabilities were more likely to be older, poorer, experience comorbidities, and be female.¹ Older age, deprivation, and comorbidities are also associated with increased risk of severe outcomes from COVID-19.² Risk of death from COVID-19 between Jan 24 and Nov 30, 2020, in England was 3·1 times greater for men with disabilities and 3·5 times greater for women with disabilities than for men and women without disabilities.³ People with intellectual disabilities living in congregate residential settings, relevant mainly to high-income settings, had a higher risk of death from COVID-19 than people without disabilities.^{4,5} But even in household settings,⁶ people with intellectual disability have an increased risk of COVID-19 death.⁷

Worldwide, disasters and emergencies often disproportionately impact the disability community, and this pandemic is no exception.^{8–10} People with disabilities have faced many barriers to inclusion in the COVID-19 response (panel). The lockdown measures societies have taken

during the COVID-19 pandemic have meant people with disabilities are worse off and more excluded.¹¹ If lockdown and curfew are enforced through aggressive actions by security forces, as in some countries in southern Africa, then people with disabilities who may need to access health care or pharmacies are penalised. Cancellation or postponement of regular health care or rehabilitation will differentially impact those with additional health needs.^{10,12} When assistive technology is not prescribed, maintained, or repaired, people with disabilities are rendered dependent. When social care is put on hold, cancelled, or reduced, people with disabilities are thrown back on the support of families if they have them. When it

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Panel: Barriers to inclusion of people with disabilities in the COVID-19 response

- Failure to ensure safety of people with disabilities in congregate living or health facilities
- Failure to ensure access for people with disabilities to: food deliveries; internet; COVID-19 testing; and water, sanitation, and hygiene facilities
- Failure to give relevant people with disabilities or their families or support workers evidence-based priority for COVID-19 vaccination or COVID-19 treatment where required
- Lack of or inadequate support for people with disabilities living alone or where family members or support workers are self-isolating or affected by COVID-19
- Unclear public health messaging or lack of accessible messaging
- Postponement of required medical treatment, including rehabilitation
- Failure to collect data on disability to allow disaggregation

is not possible to attend day centres or voluntary projects, people with disabilities may be left with no one to meet.¹³ When individuals are expected to use face masks and physically distance, people with hearing loss who cannot lip read or people with visual impairment who use guide dogs can find it difficult to follow these rules and as a result they might be stigmatised. Additionally, confinement in homes increases the risk of physical or sexual violence and abuse, to which children and adults with disabilities are additionally vulnerable.^{14,15}

Inadequate preparedness for the impacts of the COVID-19 pandemic on people with disabilities has been shockingly familiar. People with disabilities have been overlooked or are an afterthought in the education provision for children with special educational needs,^{9,12,16} the provision of personal protective equipment in social care,⁴⁻⁶ or the inclusion of sign language in government announcements. In Uganda, school closures have led to the exclusion of many young people with disabilities since educational materials are not in accessible formats and access to assistive technology, including the internet, has been a challenge.

In a public health crisis such as the COVID-19 pandemic, clear information becomes more important than ever. In the UK, messages have been confused or complicated, which has been difficult for people with intellectual disabilities to understand. In other countries, there can be low confidence in public health messaging.¹⁷ Increased isolation and uncertainty or fear about the pandemic have also impacted the mental health of people with disabilities. People with mental illness can find isolation and fear particularly debilitating.^{18,19} People with physical impairments are also disproportionately at risk of mental health conditions.²⁰ For many people, this pandemic has generally been bad for mental health.^{18,19}

Yet in the pandemic there have been some positive developments for people with disabilities. Where they can get internet access, people with disabilities have been able to participate in society as never before, because physical and communication barriers have largely disappeared as education, work, shopping, and many leisure activities have been driven online.²¹ Moreover, there are reassuring signs in some places that people are looking out for each other more, often replacing the dominant individualism of high-income settings with neighbourliness and mutual aid. People

with disabilities do much better in societies with strong social protections and where people support each other.²²

However, participation—whether digital or in person—typically requires financial and other resources. The economic shocks of this pandemic particularly impact the poorest in society, who are often old, disabled, or female. About 80% of the poorest people with disabilities live in low-income and middle-income countries, where there is either inadequate social safety protections or no welfare state.¹ The consequence is that people with disabilities often have to rely on families or charity.

People with disabilities do not want a return to the pre-pandemic status quo, which was a world filled with complex barriers to inclusion, especially in low-income and middle-income countries. The COVID-19 pandemic has increased risks, compounded unmet health needs, and disproportionately affected the socioeconomic lives of people with disabilities around the world. As evidence evolves, strategic thinking is needed about how society, social inclusion, and public health can better reach the 15% of the global population¹ who are disabled. The inclusion of people with disabilities in the COVID-19 response should be remembered throughout all post-recovery stages by assessing their needs and ensuring that they are consulted and can participate in policy development, programme design, and implementation. A better future has to grow from learning the lessons, listening to the life experiences of people with disabilities, and making meaningful investments that improve the wellbeing and socioeconomic conditions of people with disabilities.

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- 1 WHO. World report on disability. Geneva: World Health Organization, 2011.
- 2 Pijls BG, Jolani S, Atherley A, et al. Demographic risk factors for COVID-19 infection, severity, ICU admission and death: a meta-analysis of 59 studies. *BMJ Open* 2021; **11**: e044640.
- 3 Office for National Statistics. Updated estimates of coronavirus (COVID-19) related deaths by disability status January to 20 November 2020. London: Office for National Statistics, 2021. <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/coronaviruscovid19relateddeathsbydisabilitystatusenglandandwales/24januaryto20november2020> (accessed Feb 25, 2021).
- 4 Daly M. COVID-19 and care homes in England: what happened and why? *Soc Pol Admin* 2020; **54**: 985–98.

- 5 Landes SD, Turk MA, Formica MK, McDonald KE, Stevens JD. COVID-19 outcomes among people with intellectual and developmental disability living in residential group homes in New York State. *Disabil Health J* 2020; **13**: 100969.
- 6 Glynn JR, Fielding K, Shakespeare T. COVID-19: excess all-cause mortality in domiciliary care. *BMJ* 2020; **370**: m2751.
- 7 Learning Disabilities Mortality Review (LeDeR) Programme. Deaths of people with learning disabilities from COVID-19. Bristol: University of Bristol, 2020.
- 8 Office for National Statistics. Coronavirus and the social impacts on disabled people in Great Britain: September 2020. London: Office for National Statistics, 2020.
- 9 Lee S, Kim J. A country report: impact of COVID-19 and inequity of health on South Korea's disabled community during a pandemic. *Disabil Soc* 2020; **35**: 1514–19.
- 10 Theis N, Campbell N, De Leeuw J, Owen M, Schenke KC. The effects of COVID-19 restrictions on physical activity and mental health of children and young adults with physical and/or intellectual disabilities. *Disabil Health J* 2021; published online Jan 22. <https://doi.org/10.1016/j.dhjo.2021.101064>.
- 11 Kuper H, Banks LM, Bright T, Davey C, Shakespeare T. 2020. Disability-inclusive COVID-19 response: what it is, why it is important and what we can learn from the United Kingdom's response. *Wellcome Open Res* 2020; **5**: 79.
- 12 Jalali M, Shahabi S, Lankarani KB, Kamali M, Mojgani P. COVID-19 and disabled people: perspectives from Iran. *Disabil Soc* 2020; **35**: 844–47.
- 13 Inclusion Europe. Neglect and discrimination multiplied how COVID-19 affected the rights of people with intellectual disabilities and their families. Brussels: Inclusion Europe, 2020. <https://www.inclusion-europe.eu/covid-report-2020/#more> (accessed Feb 27, 2021).
- 14 Jones L, Bellis MA, Wood S, et al. Prevalence and risk of violence against children with disabilities: a systematic review and meta-analysis of observational studies. *Lancet* 2012; **380**: 899–907.
- 15 Hughes K, Bellis MA, Jones L, et al. Prevalence and risk of violence against adults with disabilities: a systematic review and meta-analysis of observational studies. *Lancet* 2012; **379**: 1621–29.
- 16 Cullinane C, Montacute R. COVID-19 and social mobility impact brief# 1: school shutdown. London: The Sutton Trust, 2020. <https://www.suttontrust.com/our-research/covid-19-and-social-mobility-impact-brief/> (accessed Feb 27, 2021).
- 17 Mackworth-Young CS, Chingono R, Mavodza C, et al. "Here, we cannot practice what is preached": early qualitative learning from community perspectives on Zimbabwe's response to COVID-19. *Bull WHO Health Organ* 2020; published online April 20. <http://dx.doi.org/10.2471/BLT.20.260224>.
- 18 Office for National Statistics. Coronavirus and depression in adults, Great Britain: June 2020. The proportion of the population with depressive symptoms in Great Britain between 4 and 14 June 2020, based on the Opinions and Lifestyle Survey. Includes how symptoms of depression have changed since before the pandemic (July 2019 to March 2020). London: Office for National Statistics, 2020.
- 19 Pan K-Y, Kok AAL, Eikelenboom M, et al. The mental health impact of the COVID-19 pandemic on people with and without depressive, anxiety, or obsessive-compulsive disorders: a longitudinal study of three Dutch case-control cohorts. *Lancet Psychiatry* 2021; **8**: 121–29.
- 20 Noh JW, Kwon YD, Park J, Oh IH, Kim J. Relationship between physical disability and depression by gender: a panel regression model. *PLoS One* 2016; **11**: e0166238.
- 21 Goggin G, Ellis K. Disability, communication, and life itself in the COVID-19 pandemic. *Health Social Rev* 2020; **29**: 168–76.
- 22 Shakespeare T. *Help*. Birmingham: Venture Press, 2000.

Ageism: a social determinant of health that has come of age



On March 18, 2021, the *Global Report on Ageism*¹ was launched by WHO, the Office of the UN High Commissioner for Human Rights, the UN Department of Economic and Social Affairs, and the UN Population Fund. Combating ageism is one of the four action areas of the Decade of Healthy Ageing (2021–2030).² Changing how we think, feel, and act towards age and ageing is a prerequisite for successful action on healthy ageing and for progress on the three other action areas of the Decade of Healthy Ageing: developing communities that foster older people's abilities, delivering person-centred integrated care and primary health services responsive to older people's needs, and providing long-term care for older people who need it.

In the COVID-19 pandemic the vulnerability of older people has been highlighted. Not only has the pandemic taken the lives of many older people, it has also exposed ageism in different settings—eg, discrimination in access to health care, inadequate protection of older people in care homes and of young people's mental health, and stereotypical media portrayals that pit generations against each other.

Consensus on the meaning of ageism has remained elusive and there is insufficient evidence on the topic.

The *Global Report on Ageism*,¹ to which we all contributed, offers a clear and widely supported definition of ageism as the stereotypes, prejudice, and discrimination directed towards people on the basis of their age. The report highlights that ageism can be institutional, interpersonal, or self-directed and summarises the best evidence on the scale, impacts, and determinants of ageism against both older and younger people and the most effective strategies to address ageism. Ageism is an important social determinant of health that has been largely neglected until now.

The social determinants of health are the non-medical factors that influence health outcomes and include the conditions in which people are born, grow up, and live and the wider set of forces and systems that shape the conditions of daily life.^{3,4} Like all forms of discrimination, ageism generates divisions and hierarchies in society and influences social position on the basis of age. Ageism results in various harms, disadvantages, and injustices, including age-based health inequities and poorer health outcomes.

Globally, ageism affects billions of people: at least one in two people hold ageist attitudes against older adults,⁵ with rates much higher in lower-income

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