The impact of the COVID-19 pandemic on deaf adults, children and their families in Ghana

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Abstract: This paper investigates the impact of the COVID-19 pandemic on deaf adults, children, and their families in Ghana, focusing on issues of inclusion. We ask what it takes to 'make cities and human settlements inclusive, safe, resilient and sustainable' (United Nations Strategic Development Goal 11) for deaf people in the context of the global pandemic in a low-resource context. The exceptional challenge to inclusion posed by COVID-19 is examined in terms of issues for deaf children and their families, and from the point of view of deaf adults in advocacy and support organisations. The pivotal language and communication issues are shown through a bioecological analysis that illuminates the interdependent dynamics of development and context, and their influence on access to, and understanding of, crucial information. It is argued that the global crisis of COVID-19 exposes and deepens issues of societal exclusion for deaf adults, children, and their families, and provokes wider questions about what inclusion means, and how it can be realised, in different cultural contexts.

Keywords: Ghana, deaf children, COVID-19, deaf adults, families of deaf children, inclusion.

Note on the authors: see end of article.

An inclusive response to the COVID-19 pandemic

In their 'Disability-Inclusive Response to COVID-19' (May 2020) the United Nations made a pledge to leave no one behind, recognising that people with disabilities are among the hardest hit by the social, economic, and health implications of the crisis. At the same time the World Federation of the Deaf (WFD) issued a statement about the greater vulnerability of deaf people, as a marginalised group, during times of crisis. This statement calls for the equal treatment of deaf people through the 'provision of access to information and health services in national sign languages, as well as access to all forms of daily life activities such as education and other public services which may be presented in different formats during this pandemic' (https://wfdeaf.org/coronavirus/).

In a letter to the World Health Organization (WHO), the WFD asked for all public information on COVID-19 to be communicated in International Sign Language (including government briefings and press conferences) and for the WHO to issue guidance to national health authorities on how to make their public information accessible in national sign languages. This letter references Articles 9 and 21 of the UN Convention on the Rights of Persons with Disabilities (CRPD) that obliges state parties to enable persons with disabilities, including deaf people, to participate fully in all aspects of life and to have equal access to information via professional sign language interpreters (United Nations 2006).

The (WFD) and the WFD Youth Section (WFDYS) subsequently joined with DeafKids International to monitor the impact of the pandemic on deaf communities, including deaf children, youth, and their families. In a joint statement they drew attention to the implications of partial or full lockdown, the subsequent closure of schools, and issues with the accessibility of online teaching. They also underlined the additional challenges for deaf children and families in low-resource settings, already vulnerable to poverty and marginalisation, and issues of child protection and safeguarding in relation to safe internet and social media use.

Research questions

In the context of this pandemic and the associated question of equality and non-discrimination, we look specifically to Ghana, a low–middle income country (LMIC), to try to understand the impact of COVID-19 on the realisation of inclusive and safe spaces for deaf adults, children, and their families. Specifically, we ask:

1. What is the impact of the COVID-19 pandemic on deaf adults, children, and their families in Ghana in terms of inclusion?

2. What influences the inclusion and exclusion of deaf people in this context?
3. What does it take to ensure a deaf-inclusive society in Ghana, and other low-resource contexts?

In this paper our discussion of 'deaf' people includes adults, children, and youth with all types and levels of hearing loss and embraces the linguistic and cultural identities of deaf people and affiliations with culture and community.

The research context

The WHO statistics indicate that there are 466 million people (that is 5 per cent of the world's population) who have a disabling hearing loss that inhibits the ability to communicate with others (Olusanya *et al.* 2014). The vast majority of this number live in LMICs where they often do not have access to appropriate ear and hearing care services that can mitigate the adverse impact of hearing loss (WHO 2020). Thirty-four million of this number are children for whom deafness in the critical stages of early development compromises the acquisition of a language (sign or spoken) that is shared by family, community, and peers (Moeller 2000, Moeller *et al.* 2013).

In such contexts the risks of marginalisation and isolation of deaf adults, children, and their families are high. Inadequate early detection and intervention compromises children's early linguistic, social, and cognitive development and leaves parents of deaf children (most of whom are hearing with no previous experience of deafness) without early support and guidance (Sass-Lehrer *et al.* 2016). This is often compounded by a shortage of professionals and access to education and health services. These factors can potentially inhibit children's progress through early childhood in terms of language, communication, learning, and psychosocial well-being (Yoshinaga-Itano 2003). Delays in language and literacy development tend to persist into adulthood, impacting on world knowledge, independence, and mental health (Fellinger *et al.* 2012). These issues are exacerbated in contexts where the experience and implications of being deaf are not fully understood, or are stigmatised, and where approaches to accessible spoken and sign communication have not been socialised.

Discussions of inclusivity in the research literature have generally centred on Northern constructs of inclusive societies, spaces, and schools for deaf people (Brennan 2003, Doherty 2012, Foster *et al.* 2003, Knoors *et al.* 2019, Kusters *et al.* 2015, Ladd 2003, Powers 2002). In these contexts where childhood deafness is picked up at birth, where inclusive mainstream and special school education coexist, and where sign language interpreters, and education and health professionals are appropriately qualified, the debates around inclusion generally centre on the preservation and protection of the linguistic and cultural identity of deaf people, and inclusion as

a societal response to diversity. There is a push away from the construct of inclusion as something that is done by people on the inside for people on the outside (Buckmaster & Thomas 2009) towards a recognition of deaf or 'Sign Language People' as a self-determining group with rights such as those claimed by indigenous people (Batterbury *et al.* 2007, Kusters *et al.* 2015).

Studies of deaf education in the Global South demonstrate the difficulties of importing and interpreting these constructs across North–South contexts where: functioning hearing screening systems are not in place; there is a lack of funded research into indigenous sign languages; teacher and interpreter training are limited, and implementation of inclusion policies is sketchy (Brons *et al.* 2019). Interestingly in this context residential schools for the deaf, such as those in parts of Africa and Brazil, demonstrate the potential to provide accessible language learning environments, and sense of deaf identity and community (Fronza *et al.* 2019, Oppong & Fobi 2019). Most of these schools were originally founded and financed by missionary benefactors with humanitarian ambitions rather than inclusivity and diversity ideologies, but nonetheless achieve the establishment of bilingual spaces where deaf learners can thrive socially and academically. However, in most Southern contexts this experience of belonging and group identity does not endure in the lives of deaf children and young people beyond these schools, where deafness is perceived predominantly as a medical condition, and where impoverished infrastructures and societal prejudices prevail (Ademokoya 2019, Lissi *et al.* 2019, Mandke & Chandekar 2019).

Other research that examines the marginalisation and exclusion of deaf people in low-resource contexts underlines the experience of, and the need for, different expressions of voice and agency. Research funded by the Economic and Social Research Council and the Department for International Development (Gillen *et al.* 2016, Zeshan *et al.* 2016), investigated adult deaf literacy in India, Uganda, and Ghana, and the potential of peer–peer support. Other research funded by the Arts and Humanities Research Council and Medical Research Council investigated deaf young people's worldmaking and expressions of resilience in South Africa through the filmic and photographic modality (Young *et al.* 2019). Both projects bring insights into different ways in which deaf people may experience exclusion because of literacy and communication and examine the affordances of different forms of elicitation and expression. Both also demonstrate innovative methodological approaches across North–South and deaf–hearing collaborations.

There is also a growing literature that examines social and cultural understandings of being deaf beyond the Western world (Ahmad *et al.* 2002, Kusters 2015, Mathur & Napoli 2011, Monaghan *et al.* 2003). This work has uncovered the different experiences of deaf people according to the geopolitical locations and places in which they live, and the intersecting categories of class, culture, educational, ethnicity, race, and

religion that contribute to a life experience (Harrelson 2017). This work has also brought to light the number of different sign languages around the world, provided new insights into the existence of small and remote deaf communities, and revealed different ways of naming and labelling deafness (Cooper & Rashid 2014, Friedner 2017, Nyst 2012, Zeshan & De Vos 2012).

Within this research context it is uncertain how notions of inclusivity as discussed by Kusters *et al.* (2015), and the ambition of group rights and self-termination for Sign Language Peoples can be meaningful in the face of the North–South inequities that deaf people experience in terms of mobility, literacy, and livelihoods (Harrelson 2017). We have seen that the North–South importation of pedagogies, communication approaches, and sign languages can be disempowering and disruptive (Brons *et al.* 2019, Fernandes & Myers 2010, Myers & Fernandes 2010). The same can be said for attempts to transpose concepts of inclusion and paradigms for deaf emancipation that are grounded in social models of disability and deafness in the Global North to Southern contexts, where deafness is more likely to be experienced as an impairment than celebrated as a positive identity (Friedner 2017)

These issues are echoed in the wider research that shows that constructs of disability and inclusion are contingent on the different ways in which societies are organised (Meekosha 2011, Singal & Muthukrishna 2014).This work highlights the inadequacy of disability and inclusion paradigms that emanate from mainly developed, wealthy Northern countries (Miles & Singal 2010, Singal 2010). Of particular relevance to this case study is the dissonance between Northern constructs of disability that emphasise individualistic concepts of identity, equality, and rights in contrast to a focus on social networks and community solidarity, more prevalent in Southern cultures (Grech 2011, Meekosha & Soldatic 2011, Singal & Muthukrishna 2014).

To examine what facilitates and inhibits deaf-inclusivity in low-resource contexts we have taken inspiration from the use by McLinden *et al.* (2018) and other scholars (Ansong *et al.* 2017, Leonard 2011) of Bronfenbrenner's bioecological systems theory (Bronfenbrenner 2005, Bronfenbrenner & Morris 2006). The use of this model allows for the examination of the issues of inclusion at an individual and sociocultural level, recognising that, alongside the developmental aspects of deafness, external environments and the interaction between these environments, shape inclusive experience (Tudge *et al.* 2009). This approach acknowledges the interplay between the biological and social aspects of deafness (Friedner 2010, 2017) and integrates sociological perspectives on deafness and development (see, for example, Holcomb *et al.* 2019) with more psychologically based approaches and medical perspectives (see, for example, Marschark & Hauser 2008, Tekin *et al.* 2001). We argue that this perspective is especially pertinent in low-resource contexts where the biological causes of deafness and the influences of the environment are acutely interconnected (Wilson *et al.* 2017).

The context of Ghana

The Constitution of Ghana (Republic of Ghana1992) states that all persons shall have the right to equal educational opportunities and facilities and it guarantees the protection and promotion of the rights of Persons with Disability (PWD) against all forms of discrimination, marginalisation, and abuse (Singal *et al.* 2015). The Constitution requires that PWD are subjected to no form of differential treatments and that PWD have access to all public places. However, the findings of this study demonstrate that this construct of access does not address the language and communication issues that obtain for deaf people in terms of inclusivity.

In Ghana the goal of inclusive and quality education for all is part of the government's reform agenda and a recognised area of need (Wolf *et al.* 2019). Furthermore, the aspiration for inclusive education provision in Ghana is enshrined in the Education Strategic Plan (ESP) of 2003–2015 and 2010–2020. This plan states that schools should identify and attend to the needs of students with disabilities and ensure quality education for all children. Most deaf children are educated in special schools which sprang from missionary work in the 1950s (Adoyo & Maina 2019). These schools are generally not embedded in the wider infrastructure of early education and care around deaf children and their families, and so provision for preschool and beyond school education and support has been much slower to develop. Societal exposure to deaf children and young people has only increased over the last twenty years and consequently social understandings of deafness and inclusivity are still developing.

When COVID-19 was identified in Ghana in mid-March it became clear through social media (Twitter and Facebook) that there were global issues of limited communication and access to information for deaf people in relation to the pandemic. These issues centred mainly on the accessibility of written information and sign language interpreting for national briefings. In Ghana, the President of the Nation, Nana Addo Danqua Akufo-Addo gave the first official television live broadcast briefing on COVID-19 on 15 March 2020. The next day, executive members of the Ghana National Association of the Deaf (GNAD) drew the government's attention to the 'great omission' of not having provided interpretation of the whole message to the deaf community in Ghanaian Sign Language (GhSL). The government listened to the concerns of the deaf community and provided simultaneous interpretation in GhSL in subsequent national broadcasts. Had GNAD not intervened, the deaf community, including children, youth, and their families, would have been excluded from crucial information on the pandemic as it unfolded.

The government and its public health institutions are now collaborating with GNAD to ensure that deaf people receive adequate and accessible information on

COVID-19 in GhSL on all national television networks. GNAD has also been providing films on how to avoid contracting the COVID-19 virus to its members via Facebook, WhatsApp, and video format (https://www.facebook.com/www.gnadgh. org/).

The practical measures GNAD is taking to make crucial information on COVID-19 available and accessible to deaf people in Ghana are now in line with the WFD seven-point guidance measures for international deaf organisations, governments, and public health institutions. These emphasise the need for adequate provision of crucial accessible information on COVID-19 for deaf people, including children, youth, and adults in the language and format of their choice. This last recommendation about format is salient as most young deaf children may not easily follow and comprehend GhSL as used on television networks and WhatsApp videos (Oppong 2006).

In Ghana, most hearing individuals have never learned to use GhSL in their homes and so communicate with their deaf children and youth in 'home or family signs', gestures, and speech (Fobi & Oppong 2019, Gadagbui 2007). Without access to the school environment, young deaf children and their families are therefore not actually getting access to all the essential information on the COVID-19 pandemic via dissemination in GhSL. Without supplementary information provided in visual, cartoon, or animation format, deaf children will have little understanding of the COVID-19 risks, and the reasons for social lockdown and school closures.

The impact of COVID-19 and the 'lockdown period also impact on deaf children's language and social development. Most public special schools for the deaf in Ghana are residential and as such serve as microcommunities where children learn to communicate and interact freely with their deaf peers and acquire and develop skills in GhSL. With schools temporarily closed, the majority of deaf children are potentially isolated in homes where family members primarily use local spoken languages.

Residential special schools for the deaf also protect deaf children from the financial hardship experienced by some families in Ghana, especially in rural regions (Amoako, 2019). These schools are generally well-resourced and provide three meals a day and safe drinking water, along with wrap-around pastoral and health care. The continued lockdown could thus bring further developmental hardships to young deaf children.

There are also potential physiological and psychological risks. Residential schools for the deaf shield deaf children from the stigmatisation that is prevalent in Ghana (Oppong & Fobi 2019) and that is a major concern for parents (Amoako 2019). There is a risk that parents will seek to segregate their deaf children from community members and the public. In such circumstances deaf children are at risk of social and cultural isolation and, in extreme cases, abusive behaviours (Avoke 2008, Offei & Acheampong 2015).

There may, however, be some positive outcomes. Children in Ghana often play together in their small vicinities and a deaf child in this community will participate in these activities. In these events, hearing children, in playful ways, compel their deaf playmates to communicate and interact using the local language to the extent that some deaf children are often able to communicate using their local spoken language before they are enrolled in preschool (Oppong 2003). However, the longer the lockdown continues, the further behind deaf children will fall in terms of their acquisition of GhSL. If schools reopen and the government mandates that pupils must wear face masks there will be further challenges for the learning and acquisition of GhSL, a language that relies on facial expression and lip patterns (Nyst 2007).

Deaf community perspectives

To further examine these issues, we interviewed members of the deaf community to solicit their views and experiences in relation to the impact of COVID-19. We specifically approached teachers of the deaf, leaders of deaf advocacy groups, and students and asked if they would share their views through (i) a WhatsApp chat, (ii) a video response via WhatsApp, or (iii) a WhatsApp video call. Of the seven participants we contacted, six provided their responses: five males and one female. This gender imbalance reflects the fact that there are currently more deaf men than deaf women involved in deaf advocacy in Ghana and that more men than women currently occupy key positions in GNAD. The participants were sent three question items in a text on WhatsApp chat.

1. What do you think is the impact of COVID-19 on the deaf community in Ghana?
2. Can you share any personal experience of this impact?
3. How is the Government of Ghana and GNAD reaching out to deaf children and their families in relation to COVID-19?

Three of the participants provided video responses in GhSL. Each video was transcribed into written English by a qualified GhSL–English interpreter who has over nine years' experience. The remaining three opted for WhatsApp chat and responded in written English and so no transcription was needed. We analysed the written transcripts of the participants' responses to look for synergies across the responses as well as for individual perspectives. Table 1 provides an overview of participants.

Table 1. Participant overview.

Participant	Role(s)	Interview response
Kwesi (deaf male)	Teacher and mentor for high school deaf students, part-time lecturer of Ghanaian Sign Language, interpreter trainer and research assistant. Works with GNAD in producing videos to educate deaf people.	Contacted on WhatsApp through text and sent a GhSL video response to the question items.
Yaa (deaf female)	Official for the youth wing of GNAD.	Contacted on WhatsApp through text and sent GhSL video response to the question items.
Kofi (deaf male)	Teacher of the deaf and pursuing a BA Degree in Special Education (Hearing Impaired) and Health, Recreation, Physical Education and Sports.	Contacted on WhatsApp through text and sent GhSL video response to the question items.
Seyram (deaf male)	MPhil and BA Degree in Special Education.	Contacted on WhatsApp through text and sent a written response through WhatsApp text.
Eshun (deaf male)	Teacher of the deaf.	Contacted on WhatsApp through text and sent a written response through WhatsApp text.
Ali (deaf male)	Official for the youth wing of GNAD and teacher of the deaf.	Contacted on WhatsApp through text and sent a written response through WhatsApp text

Responses

In response to the general question about the impact of COVID-19 on the deaf community in Ghana, participants talked primarily about fear, isolation, and hardship. The expressions of fear related overwhelmingly to the lack of access to information around the pandemic and the difficulties in understanding the information.

> *Since the emergence of C19 in the country, the deaf community were thrown into a state of panic and did not even know what the virus is or had any idea about it. They even viewed images/videos of the measures in preventing the spread of the virus from other countries but still could not comprehend what it was.* (Yaa)

Participants felt that the sign language interpretations of the ministerial announcements were insufficient in terms of providing deaf people with an in-depth understanding of the more extended discussions around COVID-19, its characteristics, and how to protect themselves. The sense of being cut off from important knowledge and the anxiety and social difficulties that this creates are also reported.

Covid-19 has a great effect on deaf people because any information, emergency issues and public educating about how to personally protect his/herself from covid19 are lacking. However, not all deaf people fully understand the information on the prevention of coronavirus. (Seyram)

Majority of the members still had little understanding of the virus. Others too who had no idea about the lockdown defied it and unfortunately met security personnel, got punished and were warned to stay at home to contain the spread. (Yaa)

All the participants talked about the need for more extensive materials and explanations for deaf people, either through televised broadcasting or social media.

… the Government accepted to provide interpreters only when there is a press conference. There are other examples like TV adverts, TV programmes and discussions that has no sign language interpreters. (Kwesi)

The hardship experienced by deaf people because of the pandemic is described in terms of loss of income as a result of the lockdown as well as the lack of access to support because of the reduced mobility.

They [deaf people] *didn't get the information on time in order to buy few food stuffs for home because most of these deaf are too poor to afford a smart phone for the messages circulating on WhatsApp. And those who did not have places to sleep, are having hard time getting a place to sleep. They are also finding it difficult getting the Government free food distribution because they don't know the food distribution centres.* (Ali)

The spontaneous resource and support among the deaf community, and the organised actions of deaf advocacy groups are mentioned by all the participants. These interventions by deaf people for deaf people respond to the need for mediation of government messages through extensive deaf-aware explanation, and in different communicative formats.

GNAD and I have tried to make short videos to advise deaf people to have better understanding on the coronavirus disease. (Kwesi)

… some deaf individuals who had acquired some knowledge and awareness on the virus created videos and images in sign language for the [deaf community] *members via WhatsApp/ Facebook.* (Yaa)

However, the point is made by several of the participants that not all deaf people are able to afford televisions and mobile or smart phones in order to access these materials. When asked about personal experiences of this impact, the participants in general reported effective strategies for getting information, addressing the safety issues of the pandemic, and dealing with consequences of lockdown. As a group of participants with roles in deaf education, sign language interpreting, and deaf advocacy, this self-efficacy might be expected, and the frustrations and boredom of

lockdown do not seem exceptional. However, even among this group of deaf people there are fears and vulnerabilities around communication and understanding and a heightened awareness of the personal circumstances of other deaf people.

> *When you meet people discussing about the virus, you watch the news on TV or read the newspaper, you will realize the virus is indeed dangerous and can kill within a short time. This instilled fear in me.* (Kofi)

> *Communication became difficulties too because everyone was wearing face masks. … Even for me, I had little understanding and sought assistance from my family. Again, old deaf individuals really had no one close to them to help them fend for themselves.* (Yaa)

When we asked specifically about how the government and GNAD are reaching out to deaf children and families in relation to COVID-19, there is consensus across the group about the positive role of GNAD in lobbying for interpreted information and providing extended educational information via WhatsApp and Facebook videos. However, the reach of this support to children and families seems not have been addressed: The educational video materials are designed for an adult audience and posted on social media that relies on access to smart phones. Deaf children's education more widely has been disrupted and the Ministry of Education and Ghana Education Services televised lessons are not interpreted and the costs of developing an app to teach deaf children at home, explored by the Ghana Deaf Teachers Union, are prohibitive.

> *There have been a number of videos on the pandemic explaining how it is transmitted and some preventive measures. … The videos are not accessible to deaf children, it's access-ible to only the youth and grown up ones with phones. Moreover, it is usually posted on social media such as WhatsApp and Facebook. Those who are not on these platforms cannot access them.* (Eshun)

The accounts from deaf adults stress the importance of accessible information and inclusive approaches to communication for deaf people in Ghana during the pandemic. The media and social media in Ghana (Facebook, WhatsApp, television, radio, Instagram, newspapers, websites, and text messages) have played crucial roles in communicating, educating, and raising awareness in relation to the COVID-19 pandemic and deaf people. Approaches to inclusivity have been sharpened in Ghana during the pandemic because of advocacy work and social media influence.

Analysis and discussion

We use Bronfenbrenner's bioecological systems theory (Bronfenbrenner 2005, Bronfenbrenner & Morris 2006) to further analyse and discuss the issues revealed in relation to children and their families, and as experienced by deaf adults.

The microsystem: day-to-day interaction

Deafness impacts on, and typically delays, language development. The spoken language environment is not fully accessible to a child with a disabling hearing loss and a sign language environment is most likely not available from birth, given that more than 90 per cent of deaf children are born to hearing parents. A delay in language development, whether this be a signed or a spoken language, has consequences for the development of literacy skills and learning more broadly. In addition to these directly developmental consequences the potential exclusion from the incidental learning about the world, and about people, that we normally gather through 'listening in' to communication around us has far-reaching implications for intellectual growth and social cognition (Brackenbury *et al*. 2006, Convertino *et al*. 2014, Hauser *et al*. 2010).

As observed in this study, this has implications for fundamental access to the information shared by the government and comprehension of information that is directly shared via sign language interpreters and that is available more indirectly (follow-up news items, adverts, TV discussions). It is evident from the reflections of the deaf participants that the provision of sign language interpreters does not automatically unlock all of the information and understanding needed to be fully included in the societal response to the pandemic. This observation aligns with findings from wider international research that critiques the assumptions of 'interpreting' meaning 'access' in, for example, the education (Heyerick & Vermeerbergen 2012, Russell & McLeod 2009), health (Angelelli 2004, Barnett *et al*. 2011), and law contexts (Hale 2008: 99, Morris 2010). Interpreting does not replace explained experience and/or mediated translation of the information (Marschark *et al*. 2004).

The additional provision of printed material is also recognised as problematic in this study in relation to the diverse language backgrounds and literacy experience of deaf adults and parents of young deaf children. The dissemination of information has to some extent been mediated by the deaf community and deaf organisations in Ghana through social media and bespoke networks (WhatsApp and Facebook groups), but reaching deaf children and their parents, especially in rural contexts, is recognised as additionally challenging. Feelings of isolation and fear that result from being cut off from information are clearly articulated by the adult participants that we interviewed.

The central role of the school as a microcommunity and inclusive language space is a point of contention in deaf education and in deaf studies debates around inclusion (Powers 2002). In the Global North there is far more emphasis on different approaches to mainstreaming deaf children and a decline in schools for the deaf in general, despite arguments for their role in supporting deaf children's language

development and social identity (Antia *et al*. 2002, Komesaroff & McLean 2006). In many LMICs, schools for the deaf are the main form of education, where deaf children are considered educable. Crucially the early years support for parents of deaf children is less well developed in countries of the South, and non-existent in some (Olusanya 2007, 2008). In the context described, the school plays a central role in providing a language-accessible environment. Deaf children are therefore vulnerable when this resource is not available if communication is not fully accessible in the home environment.

The mesosystem: the interconnecting support structures

The structures that support deaf children and families, and the essential interaction between them are particularly vulnerable to this crisis that impacts on mobility, contact, interaction, and coordination between contexts of home, school, clinic, social spaces, and communities. The breakdown of these links is indirectly an excluding factor, potentially cutting adults, children, and families off from the support that they need, and from crucial societal information. In Ghana the support infrastructure around deaf children and their families and the links between these systems are already fragile, especially in rural areas (Fobi & Oppong 2019, Oppong *et al*. 2018). This is characteristic of many other LMICs where the geopolitical context inhibits the national establishment and sustainability of education and support that is inclusive of geographically 'hard to reach' families (Störbeck & Young 2016).

In this study, the vacuum of interacting infrastructure is less felt by deaf adults for whom community and social media networks serve to bring people together, mediate the key information, and join up the support available. The bespoke WhatsApp and FaceBook groups work around the language and communication constraints to provide opportunities for dissemination and support. This supportive interaction is not, however, available to children, adults, and families without the appropriate smart technologies.

The exosystem: the legislative context

The Constitution of Ghana (1992) states that all persons shall have the right to equal educational opportunities and facilities and guarantees the protection and promotion of the rights of Persons with Disability (PWD) against all forms of discrimination, marginalisation, and abuse (Singal *et al*. 2015). The Constitution requires that PWD are subjected to no form of differential treatments and that PWD have access to all public places. Additionally, Sections 1, 2, and 3 of the Persons with Disability Law

(Act 715) (Republic of Ghana 2006) stress the need for persons with disability 'to live with their family and have the right to participate in social, political, economic, creative or recreational activities' and that 'persons with disability shall be rehabilitated in their communities, to foster their integration' (Section 15).

The concern of GNAD is that this law is not backed by Legislative Instrument and provides no policy on the use of GhSL (Sackey 2015). It is thus a challenge for educators to have a common instructional language across the schools for the deaf (Lynas 2013). Parents and caregivers who embrace and support inclusion for their deaf children are in the minority, and most teachers and parents of nondisabled children/youth perceive inclusion for deaf children and adults as a concession and not a right. More public education is needed in Ghana on inclusion as the recognition of difference. The developing advocacy networks are working on this: GNAD seeks to promote unity among the deaf population and prepares and encourages parents to get involved in the education of their children.

Whilst the legislation exists around disability and inclusion, it does not seem to reflect and fit the context. Policy and practice have not caught up. The poor implementation of inclusive policies in relation to deaf adults, children, and their families seems to be common across many LMICs, where there are reported gaps in the availability of accessible language and learning environment (Rodrigues 2019, Tedla 2019); early years support for parents (Fobi 2019), and lack of trained education professionals and interpreters (Hoa & Woodward 2019, Lissi *et al*. 2019). These issues need to be tackled at grassroots level to ensure that legislation is contextually sensitive, meaningful, and eventually instrumental (Miles & Singal 2010).

The macrosystem: cultural understandings of deafness and inclusivity

Stigma and superstitious beliefs around deafness are still common in Ghana as in many other developing contexts (Knoors *et al*. 2019). Kusters (2015) reported that the deaf are often derogatorily referred to as '*mumu*', meaning dumb. Ghanaians often describe deafness and sign languages in deficit terms, as though they are a faulty way of being and speaking (Offei & Acheampong 2015). These embedded and historical understandings of deafness have a significant bearing on the experience of the pandemic for deaf adults, children, and their families, at all levels.

Societal constructions of inclusivity, disability, deafness, language, and communication shape infrastructure (school, services, support) and influence behaviour. This comes through in our observations around the importance placed on person-to-person connections, networks, and support, and the concept of the collective that is so strongly embedded in society (although not reflected in inclusive policy document). Deaf adults support each other through the development of their

networks; the family is integral to a community, and schools provide a microfamily community that is inclusive of the cooks, the careers, and the housekeepers, as well as the teachers. The mediating roles of deaf advocacy in this context, and media/social media, are central facilitators of inclusion by pushing at societal expectations and norms on the one hand and reaching individuals and families on the other.

Conclusion

The layers of impact of the COVID-19 pandemic on deaf adults, children, and their families reported in this case study provoke reflection on the meaning of inclusivity in a world that is 'globally connected but characterised by inequalities' (Adami *et al.* 2020: 9).

The universal impact of the pandemic on everyday meaning making and social interaction is experienced by deaf adults, children, and their families in this context through the constrained opportunities for quotidian encounters with others who share a linguistic and cultural connection. The disruption to day-to-day interaction with other deaf people, whether this be serendipitous, or in formal settings, has closed opportunities for the transmission of information, experience, understanding, and kinship. Adults have not been able to congregate in deaf spaces, children have been disconnected from peer socialisation in schools, and families of deaf children have been marooned from trusted professional advice and support, and stigma-free interactions about their child.

Whilst being cut off from family, friends, and social and work communities has been a shared human experience, the information about the pandemic (what it means, how we should behave, and how we can be safe) has been accessible, and indeed all-engulfing for hearing people. For deaf adults, children, and their families this information has not been fully accessible, either through social serendipity, written/visual material, or the provision of sign language interpreters. As evidenced in wider discussions of deaf-inclusivity, interpreters do not replace instruction, networks, or community and do not provide the inclusivity of deaf schools and other types of 'congregated spaces or networks' (Murray *et al.* 2020: 695).

This case study illustrates how being deaf in an inaccessible language environment (home, school, community, or society at large) leads to multiple experiences of developmental, educational, social, and financial disadvantage. To counter these multiple and intersecting forms of exclusion and discrimination requires macrochanges to society that ensure deaf people's access to language and the opportunity to develop fluent language. In this situation sign language access is a 'multiplier' and as such provides the means to realise other human rights throughout the life course (de Beco 2014). It is

argued by the WFD, deaf academics, and activists that this can be achieved through the recognition of group rights in terms of access to linguistic and cultural accessibility. In these terms an inclusive society is one that recognises sign language as an equal language (Kusters 2015, Murray *et al.* 2020).

That many countries in the Global North aspire to this ambition, or are moving towards recognition of group rights, and the self-determining status of deaf people as a linguistic minority is evident in the wording of the CRDP Article 24(3)(b) that calls on state parties to facilitate 'the learning of sign language and the promotion of the linguistic identity of the deaf community within education'. However, the impact of the pandemic on deaf adults, children, and their families has exposed the limits of this model of inclusivity as an adequate blueprint for global implementation and change.

In Ghana, and many other countries of the South, the experience of exclusion and marginalisation resulting from the COVID-19 pandemic is an extension and deepening of pre-existing social inequalities: The isolating experience of growing up, or having a deaf child in a society where deafness is stigmatised, is intensified as a result of the pandemic which can give rise to exasperated discrimination and scapegoating behaviour (and in some cases even violence). In such a context the consequences of being cut off from a deaf sign language community, and the social emotional support and group affiliation afforded by such a community lead to feelings of fear and helplessness and have a lasting impact on well-being, health, safety, and independence. The societal pivot to online, virtual, and smart modalities only serves to entrench a digital divide across global contexts, between those who have technology, resources, and connectivity, and those who do not. Despite the potential inclusivity of online resources, it is acknowledged by the United Nations that learners with disabilities are least likely to benefit from distance learning solutions (United Nations 2020).

However, this crisis has shone a light on ways in which deaf people manage situations of isolation and discrimination. Inclusivity, as described by the deaf adults in this study, is achieved via collective and coordinated efforts around the child and the family and an enhanced sense of shared identity. There are lessons to be learned from this in terms of how to build a future for deaf adults, children, and their families in Ghana, and other low-resource contexts. That said, with this learning comes a collective responsibility. The examination of inclusion within the context of the pandemic is a critical test of global commitment to inclusivity, as expressed in the 2030 Agenda for Sustainable Development, and the upholding of disability rights agreed within the Convention of the Rights of Persons with Disabilities. The North–South relevance of these treaties is weighed in the balance in this crisis where we are globally connected, by one shared danger, but unequally affected.

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Recent publications include:

Fobi, D. & Oppong, A. M. (2019), 'Communication Approaches for Educating Deaf and Hard of Hearing (DHH) Children in Ghana: Historical and Contemporary Issues', *Deafness and Education International*, 21(4): 195–209. https://doi.org/10.1080/14643154.2018.1481594

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Recent publications include:

Fobi, D., Acheampong, N. O. Fobi, J. & Appau, O. (2017), 'Approaches to Studying Among Students with Disabilities at the University of Education, Winneba, Ghana', *Journal of Education and Practice*, 8(26): 57–63.

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Recent publications include:

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