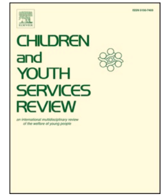
Children and Youth Services Review 145 (2023) 106801

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth



Risk factors of orphan and vulnerable children in a children's home during the COVID-19 pandemic

Lucia Munongi [a,*], Daphney Mawila [b]

[a] Faculty of Education, University of Johannesburg (Soweto Campus), GNA 224, Robert Sobukwe Building, 326 Chris Hani Road, Pimville 1809, South Africa
[b] Faculty of Education, University of Johannesburg (Soweto Campus), GNA 226, Robert Sobukwe Building, 326 Chris Hani Road, Pimville 1809, South Africa

A R T I C L E I N F O

Keywords:
Caregiver
Children's home
COVID-19
Orphan
Vulnerable children
Risks

A B S T R A C T

Orphans and vulnerable children in children's homes are exposed to multiple psychosocial risks. This study aimed to explore the risks facing orphans and vulnerable children in a children's home in a township setting during COVID-19. Qualitative data was thematically analysed for this study. Fifty-eight female Black African children ($n = 58$) in a children's home were individually interviewed to ascertain the psychosocial risks that they experienced during COVID-19. The participants were orphans and vulnerable children residing in a children's home located in Johannesburg in South Africa. All children were enrolled in either primary or secondary schools located nearby the children's home. Boys were not included because the children's home only caters for females. The study found that unhealthy coping mechanisms, non-compliance with COVID-19 safety protocols, disruptive behaviour, fear of being infected and abuse by caregivers emerged as risks. We recommend that children be offered life skills such as coping mechanisms when faced with adversity, be constantly monitored to ensure adherence to safety rules and be given therapeutic interventions to deal with their fears. Furthermore, caregivers need to be psycho-educated on the giving of care to orphans and vulnerable children. The physical environment of the children's homes should be made conducive to allow healthy interactions with factors that impact on them.

1. Introduction

The issue of orphans and vulnerable children (OVC) continues to be a global plight and mostly affects nations with a high prevalence of HIV/AIDS (Spiegel, 2004). These children's wellbeing and development are threatened due to several difficulties, such as poverty, neglect, orphanhood, abuse and malnutrition, among many others (Goldberg, Brodzinsky, Singer, & Crozier, 2021). Consequently, OVCs are placed in foster homes, group homes or orphanages to provide them with a home. According to Pillay (2016, p. 558), some children are forced into these institutions in South Africa due to "homelessness, poverty, health issues, experiences of child abuse and neglect, discrimination and domestic violence". This study will focus specifically on children's homes which are defined as institutions that wholly or mainly care for children aged 18 or below (Care Standards Act, 2000). The South African Children's Act 74 of 1983 further defines a children's home as "any residence or home maintained for the reception, protection, care and bringing-up of more than six children apart from their parents but does not include any school of industries or reform schools" (Republic of South Africa, p. 3). These are the definitions that guide this study.

One would hope that risks would be minimal when OVC are placed in such homes; however, OVC continue to be threatened by several risks that impact their psychological, social, emotional and educational life (Roy, 2021). With the onset of COVID-19, OVCs risks were exacerbated. To illustrate, Chawla, Tom, Sen and Sagar (2021) stipulate that the outbreak of COVID-19 resulted in various negative psychological outcomes for individuals, especially for vulnerable groups such as OVC. These outcomes included fear, anxiety, isolation and depression (Buzzi et al., 2020). Goldberg et al. (2021) state that COVID-19 resulted in isolation for children and decreased access to educational and mental health professionals. These OVCs also faced the aforementioned challenges during the pandemic. Turney and Wildeman (2016) stress that compared to their counterparts staying with their original families, children in children's home are prone to emotional, academic, behavioural and scholastic difficulties.

According to Chaturvedi et al. (2021), the onset of the COVID-19 pandemic which resulted in the lockdown had devastating implications on the psychological functioning of individuals across the globe.

* Corresponding author.
E-mail addresses: luciam@uj.ac.za (L. Munongi), dmawila@uj.ac.za (D. Mawila).

https://doi.org/10.1016/j.childyouth.2022.106801
Received 8 June 2022; Received in revised form 30 September 2022; Accepted 28 December 2022
Available online 30 December 2022
0190-7409/© 2023 Elsevier Ltd. All rights reserved.

Orphans and vulnerable children (OVC) were not spared from these implications. A study by Haffejee and Levine (2020) showed that COVID-19 interrupted or reduced the provision of psychological services and contact between children in care and their families which increased stress levels among the children. Romero, Lopez-Romero, Domínguez-Alvarez, Villar, and Gomez-Fraguela (2020) also note that behaviour problems increased among children at greater risk. This could be attributed to interrupted or reduced access to therapeutic and social services which are crucial for handling risky and/or disruptive behaviour (Wong, Ming, Maslow, & Gifford, 2020). The Lancet Institutional Care Reform Commission Group (2020) also noted that some children were suddenly returned to their families or biological relatives without proper counselling or follow-ups which was necessitated by COVID-19. Without following proper procedures, Wilke, Howard, and Goldman (2020) argue that moving children out of children's homes back to their families can have negative effects. Thus, the impact of COVID-19 on residential care provision for OVCs in the care system had far reaching consequences on their psychosocial wellbeing. Studies such as these provide insights on the necessary interventions to reduce the OVC's further exposure to risks (Raman et al., 2017), especially with the added impact of COVID-19.

Since COVID-19 is a recent phenomenon, risks affecting OVC in children's homes during COVID-19 have not been sufficiently explored in South Africa. Studies on children's homes located in South African townships are also limited. The authors of this study argue that the wellbeing of OVC needs to be constantly monitored as they continue to face multiple risks in their lives. This also fulfils the United Nations Convention on the Rights of the Child Preamble which promotes that children are entitled to special care and assistance (United Nations, 1989). To improve and maintain the wellbeing of OVCs, it is thus vital to study the risks that affect OVC's development.

1.1. *Risks that affect OVC in children's homes*

The definition of OVC is contextual and can vary from country to country. However, millions of children are classified as OVC due to having lost one or both parents, having been abandoned by parents or living in hardship (Skinner et al., 2004). These children are exposed to several risk situations such as hunger, ill-health and maltreatment leading to psychosocial, emotional and educational difficulties. Muchenje (2014) noted that in Zimbabwe, placement of children in foster homes is at its peak after epidemics such as HIV/AIDS. This is probably because crises bring added risks to what already exists in the lives of OVC. The COVID-19 pandemic is one such crisis that might result in the accelerated placement of children into children's homes to improve their situation.

Out of an estimated 2.9 million OVC in South Africa (Statistics South Africa, 2019), only a few find their way into children's homes where their lives are expected to improve. However, there is no guarantee that this improvement will happen as some continue to experience risks that impact their lives. Barter (2013) noted that children in foster homes are at a higher risk of abuse resulting in being deprived of happy childhood experiences which could also apply to children's homes. In particular, the United Nations Internation Children's Emergency Fund (UNICEF) (2010) noted that many cases of physical abuse as a form of discipline have been reported in children's homes around the world. South Africa is not an exception to this, given that the idea of using corporal punishment is still prevalent among some people. Muchenje (2014) further noted that children in care institutions had very high scores in a psychological disturbance test due to physical and emotional abuse of some of the children by staff in the institutions. This exposes OVC to further risks when placed in children's homes which are supposed to protect them.

Another risk is the lack of adequate resources such as food, medical supplies, finances and qualified caregivers. UNICEF (2011) discovered that in the Democratic Republic of Congo, some foster homes were so economically disadvantaged that they lacked the resources to provide the best nutrition, environment and care for the children. Similarly, Human Rights Watch (2014) found several Russian children's homes lacked good nutrition and medical care. Food is one of the basic human rights that children's homes should provide to OVC, yet the situation seems to be different in practice; coupled with incompetent staff, understaffing, lowly paid staff and high staff turnover, these also contribute to further risks for OVC in children's homes (Pinheiro, 2006).

1.2. *The impact of COVID-19 on OVC in children's homes*

In South Africa alone, COVID-19 had infected approximately 3,85 million people and killed approximately 101 000 people in South Africa by the time of this study (2022) (UNICEF, 2022). The pandemic was one of the worst crises in terms of causalities. It resulted in the death of many people, especially adults who might have been parents (Wyk, 2020). This possibly could have contributed to the increased numbers of OVC. By mid-June of 2021, children aged 19 years or younger accounted for 10.2 % of new infections and 0.7 % of the deaths in South Africa (Kufa-Chakezha et al., 2021). Furthermore, people were and still are gripped with the fear of being infected or dying from COVID-19. The nature of the virus meant that a hard lockdown was necessary and social distancing and high levels of hygiene observation such as the regular sanitisation of hands or washing them with soap was a necessity (Haider et al., 2020). Given the living arrangements in children's homes, where children are housed in dormitory-style accommodation, one wonders what the risks accompanying the presence of COVID-19 were and if the safety protocols in these institutions were observed. Because of the OVC's living arrangements in children's homes during the pandemic, their experiences may be different from those of other children living with their biological parents and family members. Since COVID-19 is a new phenomenon, it can be reasoned that the risks could have surged in children's homes as both the staff and children might not have been aware of how to handle its effects. For those children who were still in contact with their biological families, this could mean that besides worrying about themselves, they were also worried about their outside families. Losing direct contact with family during lockdown could have negatively affected their normal routine of either visiting family or having family visiting them. All this could have resulted in added impacts on the children's educational, psychosocial and emotional wellbeing. Given the above effects of COVID-19 on OVC in children's homes, we found that there was a need to do a further investigation to uncover the risks that were at play in a township children's home. To our knowledge, such a study in a township setting has not been done in South Africa during the COVID-19 pandemic, hence the need to fill the knowledge gap in this area.

2. Methodology

The study used a generic qualitative design to explore the risks experienced by OVC in a children's home in a township in Johannesburg, South Africa. Merriam (2002) defines generic studies as those that seek to understand how people interpret, construct or make meaning from their world and their experiences. This design was a good fit for this study as it aligned with our aim of understanding how OVCs in a children's home experienced and interpreted the risks that faced them during COVID-19. Also, we were interested in the honest opinions of participants and their life experiences rather than in the inner structures of the participants' experienced processes (Percy, Kostere, & Kostere, 2015). Thus, a generic qualitative design was more suitable. This study focused on OVC who were residents and under the care of a children's home located in a township during the COVID-19 pandemic.

2.1. *Research site*

The research site is a children's home located in a township in

Johannesburg, South Africa. The children's home is administered by a religious organisation but also receives a subsidy from the state and donations from non-governmental organisations. It only caters for female children who are either orphans or non-orphans from the age of three to 18 years. The children are admitted into the children's home through a court order. After that, the children are expected to be independent or to rejoin their families. However, a few stay beyond 18 years under exceptional circumstances such as having no family to go to. All caregivers have a caregiver's certificate as their highest qualification and are recruited from the surrounding communities. The caregivers also receive a monthly salary from the religious organisation administering the children's home. They are also provided with in-service training on caring for children. All caregivers are Black women with families of their own, hence they go back to their homes when off duty.

2.2. Selection of research sample

The study comprised 58 participants who were purposively sampled. Purposeful sampling was preferred as we wanted to target those children who were willing to participate and information-rich participants who could give us rich responses to the research question we wanted to address (Palinkas et al., 2015). Forty-seven participants were orphans and 11 were non-orphans. Orphans are defined as children who have lost one or both parents in death (DeLuca, 2019) and non-orphans are those whose parents are alive but are placed in the home due to their vulnerable status. The non-orphans had been admitted to the home for various reasons such as neglect and abuse by parents or guardians and economic hardship resulting in their parents or caregivers failing to provide for them. The participants' ages ranged between nine and 18 years. All participants were female and Black, as the home only accepts female OVCs who come mainly from the local townships where mainly Black people live. All participants were attending local schools in the surrounding townships. The majority of the participants spoke isiZulu and Sesotho as their home languages. The inclusion criteria included the willingness of the participants to take part in the study, being a child residing at the children's home under study and being between nine and 18 years of age. Furthermore, the participants had to be conversant in one of these three languages, namely English, isiZulu or Sesotho which were used to conduct the interviews. The selection criteria excluded those aged eight years and below because the children's home only allowed us access to the older girls.

2.3. Procedure

Data were collected through semi-structured individual interviews between September and October 2021. Through funding received for this project, participants were provided with masks and sanitiser in adherence to COVID-19 safety protocols. During the data collection process, social distancing was maintained and no refreshments were provided to the participants as a safety measure against the spread of the COVID-19 virus. The rooms used for the interviews were also fumigated by the children's home management prior to the interviews. The interviews were between 20 and 30 min long with each child.

An interview protocol was developed by the researchers following the four-phase process to interview protocol refinement by Castillo-Montoya (2016). In phase one, interview questions were developed and guided by the research questions to be answered. In phase two, the questions were designed to promote an inquiry-based conversation by using the basic language that the targeted participants could easily understand but at the same time could provide answers to our research questions (Castillo-Montoya, 2016). In the third phase, we solicited feedback on the protocol to see if the participants understood the interview questions (Patton, 2015). Together with the research assistants, we used a checklist to read through and analyse the questions, putting ourselves in the shoes of the interviewees to imagine how they would understand and respond to each question (Maxwell, 2013). Discussion sessions were held to provide feedback on how simple, clear and easy to answer the questions were. Finally, in phase 4 we piloted the interview protocol with five girls from the children's home who were not part of the study sample as recommended by Merriam (2009). Further refinements to the protocol were made before the actual study commenced.

The same questions were asked to all participants following the same pattern for consistency. However, for the younger participants, some terms were simplified further in cases where they did not understand them. The interviews were conducted in a private room to preserve confidentiality and allow the children to freely express their experiences. The questions focused on the risks that the children faced during the pandemic. Data were collected in the local languages of isiZulu and Sesotho by both researchers and the six trained field workers. The interviews were audio-recorded with the participants' and guardians' consent. The data were transcribed and translated by the research assistants, who were fluent in either isiZulu or Sesotho and checked by the second researcher with the help of an independent researcher for accuracy.

2.4. Ethical considerations

This study was approved by the University of Johannesburg Ethics Committee. Permission to carry out the research was granted by the Salvation Army authorities, who are the gatekeepers of the children's home. Furthermore, the caregivers and the managers of the children's home permitted the children to participate in the study and the OVC also gave assent to participate. All participants were given a letter detailing the nature of the study and this was followed by a verbal conversation to inform them of the nature, purpose and requirements of the study before data collection commenced. A research proposal explaining the nature and purpose of the study was also given to the administrators and the social workers. The issue of confidentiality and voluntary participation was emphasised and they were told that they could withdraw from the study at any time without any consequences.

2.5. Data analysis

Data were transcribed verbatim and thematically analysed following Braun and Clarke's (2006) six steps of thematic data analysis to find emerging themes. In the first step, the researchers read the transcripts several times and listened to the audio to check if the data had been correctly transcribed and to become familiar with the data (Braun & Clarke, 2016). Secondly, we generated the initial codes manually by noting down potential connections in the data that were of interest, taking care to avoid overlaps in the codes (Braun & Clarke, 2006). Both researchers independently coded the data and compared codes for similarities. Where differences were noted, discussions were held until an agreement was reached. Thirdly, we searched for themes by carefully examining the codes and collating data extracts to look for emerging themes (Braun & Clarke, 2006). In step four, we incorporated any additional codes we found from the transcripts into the relevant themes (Braun & Clarke, 2006). In step five, we named and defined the themes by rewording them to ensure they clearly brought out different risks facing the OVCs. Further discussion sessions were held by the researchers to finalise the themes. Finally, in step six we reported our findings (Braun & Clarke 2006), supporting each theme using verbatim extracts from the participants. These themes are presented in the results section.

3. Theoretical framework

Bronfenbrenner's bio-ecological systems theory was used as the informing theory for this study. The bio-ecological systems theory states that the context in which an individual develops influences their development (Bronfenbrenner, 1994). The theory comprises the

microsystem, mesosystem, exosystem, macrosystem and chronosystem. According to Bronfenbrenner (1974), the microsystem is the layer closest to the individual and has a direct influence on the individual's development. This comprises the child, the family, the peers and the child's school with which the child directly interacts (Beck, 2000). The mesosystem is the interaction of the elements in the microsystem. This layer has a bi-directional influence on the child's development as the child can also influence the activities (Guy-Evans, 2020). The third layer is the exosystem comprising factors that are distant from the child but indirectly affect them (Bronfenbrenner, 1979). For example, a parent's long working hours which denies them the full care of the child can have a negative effect on the child's development. The fourth layer is the macrosystem which includes the prevailing societal culture, ideologies and attitudes (Bronfenbrenner, 1977). Thus, a society that holds positive attitudes and promotes a culture of caring and support for OVCs facilitates positive development of the child and vice versa. The last layer is the chronosystem which includes the environmental changes that happen over time in the child's life (Guy-Evans, 2020). These are life-changing events such as the death of a child's parents, relocation or a pandemic that can have negative effects on the child's development. Thus, all these factors either positively or negatively impact the child's development depending on the circumstances presented.

This theory applied to our study as it enabled us to explore the risks that OVCs have experienced during the COVID-19 pandemic. The children's home, which is made up of the child, the peers and the caregivers, makes up the microsystem. The interaction of these microsystems in the children's home makes up the mesosystem. The impact of COVID-19 on the caregivers could also indirectly affect how they interacted with the children at the exosystem level. Furthermore, the impact that COVID-19 had on the economy (macrosystem) and the sudden changes that were brought into the children's lives (chronosystem), can all be used to explain the various risks the children were exposed to during the pandemic. During the COVID-19 lockdowns, the OVC were limited to interactions within the home which mostly encompassed the micro-system and mesosystem, yet the other layers still had an impact on their lives. Therefore, in this study, all layers were explored.

4. Results

From the data analysis, five themes emerged. These were: a) unhealthy coping mechanisms; b) non-compliance with COVID-19 safety protocols; c) disruptive behaviour; d) fear and e) abuse by caregivers. These are expanded upon below and quotes from the participants are used verbatim to support each theme.

Theme 1: Unhealthy coping mechanisms

The results of the study showed that one of the risks experienced by the participants was unhealthy coping mechanisms during COVID-19. One of these unhealthy coping mechanisms adopted by the participants was isolation. It seems that the participants felt that self-isolating and not talking to anyone about their problems was a better way to resolve their issues. They mentioned that they had no one that they could talk to despite their caregivers living with them. Given that many participants resorted to isolation as a coping mechanism, one wonders if they were aware that this was an inadequate way of coping with the challenges they were facing. Considering this, participant 7 reported: '*I just keep quiet the whole day and I don't talk to anyone here at home.*' Participant 13 also mentioned that: *'I spend most of my time in my room. I don't socialise with people here. Like … Ma'am I don't like socialising.'* Despite being aware that talking about challenges is a healthy coping mechanism, some participants were still not interested in applying it. Participant 2 confirmed this by saying: *'I don't talk to anyone but am not that into it, I know that it's there, but I am just not interested.'*

Furthermore, self-harm tendencies and suicidal thoughts as unhealthy coping mechanisms were prevalent among the participants. Amid the challenges, the participants indicated that they resorted to cutting themselves with sharp objects such as razor blades as a way to release their stress. These ideas were reflected in the words of participant 15 who said: '*I cut myself with a razor blade.*' In addition, some of the participants reported suicidal thoughts combined with self-harm as a coping mechanism. This was reported by participant *22* who said *'Eish, I do, I stress about a whole lot of things. No, like I can't even talk. I just can't talk. It's the way I am. They have already damaged me. I can't cope, I have suicidal thoughts. When I'm stressed and struggling to deal with certain issues, to release that pain I cut myself.'* The deep feelings of helplessness and hopelessness were reflected in the words of this participant.

Others denied the existence of the pandemic as an unhealthy coping mechanism, as they claimed that they were not being affected by COVID-19. Denial was visible despite those immediate to them and the rest of the world being affected. This might have been their way of coping by refusing to accept reality, yet the reality still stands. Denial was evident in the words of participant 5 who said: *'I don't encounter any problems related to COVID-19.'* Participant 30 concurred and said: *'No, I don't talk to anyone because I'm not really affected by COVID-19.'* In support of this, participant 53 added that: *'l am not sure that COVID-19 exists.'*

These were unhealthy coping mechanisms as they did not lead to positive adjustments to the risks posed by the pandemic. When faced with risks such as COVID-19, individuals must employ effective coping mechanisms to cope with the presence of adversity. However, this study's results showed that most participants were not using effective coping mechanisms.

Theme 2: Non-compliance with COVID-19 safety protocols

Another risk facing OVCs was the non-compliance with COVID-19 safety protocols which included social distancing, wearing of masks and sanitising of hands. While every-one was worried about their safety during COVID-19, this was made worse for children in the children's home as it was exacerbated by living in overcrowded environments. The protocols of social distancing and the wearing of masks were not always adhered to in this children's home. Most participants confirmed that they were not observing these protocols as was expected of them. This was confirmed by participant 9 who said*: 'No, we don't observe social distancing we will be just playing.'* Participant 54 also had this to say: *'I don't do social distancing. No, we are not practising social distancing.'* Some expressed that they were concerned that breaking the protocols would result in them getting infected by the virus. For example, participant 44 pointed out: '*There is no social distancing here and that means other children will make me sick.*' Participant 37 also expressed concern over the lack of mask wearing as a safety issue and said: '*I don't feel safe sometimes, because sometimes people exchange masks, and you can see someone borrowing someone's mask.*' Despite the participants feeling unsafe, they acted carelessly when trying to cope. This was evident from participant 14 who said: *'We borrow masks from each other.'* Participant 50 also agreed and said *'It's not safe anymore. And I can't wear a mask all day because it is hot.'* Generally, the participants showed that they were aware of the dangers of not following the COVID-19 protocols, yet they still did not comply.

Theme 3: Disruptive behaviour

The third risk that emerged from the results was disruptive behaviour. When children are facing difficulties, some of them may not behave well and resort to unacceptable behaviour. The results of this study revealed that participants saw disruptive behaviour as a concerning risk. Many participants expressed that there was a lot of fighting between them, stealing of belongings, discrimination and disobedience of rules. For example, participant 12 pointed out: *'Stealing of clothes and fighting amongst ourselves are the challenges faced here at the children's home.'* Participant 43 added: '*Besides discrimination, other children steal my belongings.*' The stealing of belongings came out very strongly despite the participants being allocated equal resources. Thus, this disruptive behaviour could not have been because they lacked supplies. Common items that were stolen included toiletries and stationery among other things. This could be a sign of discontent with what they possessed. As evidence of further disruptive behaviour, some participants confirmed

that they disobeyed rules that were put in place to protect them from contracting and spreading the COVID-19 virus. Participant 33 confessed: '*I didn't face any challenge because even during lockdown we were able to go out without permission.*' In addition, participant 56 also said: '*It is sad that you should not hug your friend and you should not do handshakes, but sometimes I do not follow that although we are not allowed to do it.*' Participant 1 added: '*Look, some children sneak out of the home and go to groove [dance] and because at groove is packed there are high chances that they might get covid and bring it back here at home. So, by going to groove, they put our lives in danger.*' Thus, the breaking of these rules was intentional with full awareness of the consequences.

Theme 4: Fear

In this study, fear also emerged as another risk for children during COVID-19. In a situation where a person perceives a threat, such as a pandemic, fear is a normal human emotion that is triggered. During COVID-19, the main threat was that of getting infected by the virus. As such, in this study, many participants expressed the fear of getting infected with the COVID-19 virus and expressed feelings of anger in cases where they were not made aware of possible exposure to the virus in the children's home. To this effect, participant 17 said: *'Our care worker was exposed to COVID-19, and I was scared that I might get infected too.'* Participant 27 concurred and said: '*Our cook was exposed to COVID-19, and I was scared and angry that she did not tell anyone about it.*' It was interesting to note that even some of the participants who displayed risky behaviour expressed fear of contracting the virus when they became aware of someone having been infected. For example, participant 11 also added: '*We just heard that a care worker had COVID-19 but we were not given her name and I was really scared.*' Participant 48 also expressed that *'when I play around my friends, what if I get COVID.'* The idea of knowing that they could contract COVID-19 anywhere seemed to increase the participants' fears.

Theme 5: Abuse by caregivers

Another concerning risk was the abuse of children in the children's home by their caregivers. The abuse was in the form of beatings and being shouted at by the caregivers. Participant 20 pointed out that *'getting beaten by our guardians are the only things making me uncomfortable.'* Participant 8 said: *'Like, have you ever felt like you are not part of certain people. Like I sometimes feel I shouldn't have come here. The caregivers are rude and don't want to listen to us or talk to us well. They shout at us. They judge us. They also swear at us a lot and in front of every-one.'* Such negative behaviour portrayed by the caregivers made the participants feel that they did not belong. This is despite the participants being in an environment where they should be protected from abuse. In addition, some participants mentioned being mocked because of their background. Participant 32 said: *'They mock us that we used to stay in shacks.'* This was not well received as this reminded the participants of their difficult situations. Some participants mentioned that they were encouraged by their caregivers to fight back if their peers fought with them. It appears that the caregivers could not adequately assist with incidences of bullying and encouraged the participants to fight back. Participant 52 said that *'the care workers make us feel that we are not part of this home, they abuse us and also teach us to bully each other. They teach us that when someone beats you, I should retaliate.'* Thus, the caregivers posed a risk to the participants.

5. Discussion

The study found that unhealthy coping mechanisms were one of the risks prevalent for OVC in children's homes. Veijalainen et al. (2019) stated that children and youth's coping strategies in stressful conditions involve mental and/or physical actions and can take the form of denial, regression, withdrawal, impulsive acting out or suppression as well as problem-solving, negotiation, conciliation or humour. A study by Aldossari and Chaudhry (2020) found that participants resorted to using unhealthy coping mechanisms during the pandemic. The authors mentioned that the participants' first-hand narrative emphasised the application of a range of unhealthy coping mechanisms such as disengagement, denial and energy conservation. Correspondingly, Veijalainen et al. (2019) found that children with poor self-regulation skills used withdrawal strategies when faced with adversity and this included feelings of disappointment and a quitting attitude. In contradiction to this study, a study by Windarwati et al. (2021) found that health workers coped with the COVID-19 outbreak by adopting a positive attitude to motivate themselves (98.3 %), reading about COVID-19 and its prevention and transmission (98.3 %) and following appropriate self-protection measures (mask, gown) (98.3 %). In addition, the health workers viewed family support as a significant factor motivating health workers to deal with the COVID-19 outbreak (98.7 %) (Windarwati et al., 2021). Man et al.'s (2020) study also reported that the most common coping mechanism for their participants was positive reappraisal and a refocus on planning, which seemed to be more prevalent than it was in the general population.

In line with the bio-ecological systems theory, the results of this study reflect a malfunctioning microsystem which may have failed to equip the participants with healthy coping mechanisms from a young age. Bronfenbrenner (1994) pointed out that the microsystem, being the most immediate in the child's environment, has the most direct impact on the development of the child. Thus, it is expected that the caregivers at the children's home, the school and the families where the children came from should be equipping the children with healthy coping strategies for survival during times of adversity.

In response to the COVID-19 pandemic, the government provided several safety protocols and preventative measures to be adhered to. This study also found that non-compliance with social distancing, not wearing masks and other safety protocols were concerning risks for OVC in the children's home. This result correlates with a study by Nivette et al. (2021) who found that non-compliance, especially with hygiene-related measures, was more prevalent in males and young adults with low trust, including in the government's measures for fighting the virus. In addition, Hills and Eraso (2021) reported that the vast majority (92.8 %) of their participants did not adhere to all social distancing rules and nearly half (48.6 %) engaged in intentional non-adherence to rules. Dukhi et al.'s (2021) study also revealed that not every-one complied with the COVID-19 protocols. They found that people left homes to socialise with neighbours and friends during lockdown level 5 and young people in crowded areas and with lower levels of education went out to socialise during pandemics. Our study confirms Dukhi et al.'s (2021) results as the children's home is located in Soweto, an area known to be overpopulated. This could be explained by the interactions in Bronfenbrenner's mesosystem level (Beck, 2000), which in this case, were between the participants and their caregivers who may have not imposed strict COVID-19 control safety measures because of the environment in which they lived. For Bronfenbrenner (1994), the mesosystem interactions also directly impact how a child behaves. In addition, even though in the macrosystem the government imposed rules to contain the spread of the virus, these were still not adhered to in the microsystem as expressed by the participants in this study. In line with this finding, Nivette et al. (2021) stated that attempts to contain and mitigate the COVID-19 crisis through lockdowns may also have been particularly challenging in developing countries where the majority of low-income households face deplorable housing conditions and live in overcrowded spaces, making social distancing and proper self-isolation nearly unmanageable. In children's homes, the impact has been detrimental and system effectiveness has been significantly compromised (OECD, 2020) – non-adherence to all social distancing rules in the children's home was largely due to having less control over social distancing. Authors such as Czeisler et al. (2020) and Jarynowski et al. (2020) affirmed that the success of measures to slow or stop the spread of COVID-19, such as the wearing of face masks and social distancing, depended on the commitment and capacity of individuals to comply with them, and their willingness to change their behaviour accordingly. Kaine et al. (2022) argued that failure to wear face masks and socially

distance might have put the outcome of eliminating COVID-19 from countries in jeopardy.

Participants in this study complained of several disruptive behaviours by their peers. Spinelli et al. (2020) in Italy revealed that some of the factors that amplified children's behavioural problems were the pandemic and the lockdown. Compared to Christner's (2021) study, which showed fewer conduct problems among children aged between seven to 10 years, the situation was different in our study as it involved children aged between nine and 18 years and the issue of disruptive behaviour seemed to be prevalent across all age groups. This could be explained by previous research which revealed that children who have grown up in chaotic homes where noise, overcrowding and disorder are common, tend to score higher on measures of problem behaviours than those raised in less chaotic homes (Evans et al., 2005; Hanscombe et al., 2011). Consequently, children who are placed in children's homes are usually from unstable families that may be characterised as chaotic homes. Thus, this may explain why most children from all age groups in this study complained of disruptive behaviour as a risk factor. Participants in this study reported that their caregivers also encouraged some disruptive behaviour, such as bullying and fighting. This could be attributed to a lack of knowledge on how to handle such behaviour as revealed in Oruche et al.'s (2015) study where many caregivers confessed to being unsure of how to deal with the adolescents' behaviours. Such behaviours could also be linked to Bronfenbrenner's (1977) chronosystem, where the sudden life event, namely the COVID-19 pandemic, brought changes to the participants' lives. These included forced isolation and disrupted or limited psychosocial services which could have impacted the participants' psychological wellbeing, resulting in disruptive behaviours as evidenced in our findings.

Although studies have found that higher levels of fear were associated with older age children (Cerda & García, 2022; Recio-Vivas et al., 2022), this study's results exhibit the presence of fear among young children. Ornell et al. (2020, p. 232) posit that 'fear is an adaptive animal defence mechanism that is fundamental for survival.' However, the authors agreed with Christner et al. (2021) that persistent fear is not desirable as it can lead to or increase different psychiatric disorders such as anxiety in healthy individuals or those who already have such disorders.

Christner et al. (2021) further highlighted that the fear of getting infected by the virus and being concerned about the wellbeing of those close to you may potentially result in distress. This was very clear in the results of this study as all children who became aware of someone close to them, like their caregivers being infected, became fearful as they realised that they were at risk of being infected as well. Despite being young and not really a high-risk group for being severely infected by the virus, especially during the first wave, the participants in this study showed clear signs of fear of the disease because they knew that someone who they were living with was infected. This confirms Recio-Vivas et al.'s (2022) study which found that the level of fear was associated with having someone living in the immediate environment who was infected with the virus. For Bronbrenner (1974), the exosystem which comprises events affecting the child's caregiver but in which the child is not directly involved can still impact the child's wellbeing. This was exhibited when the caregivers in the children's home were infected which instilled fear in the children yet the children may have had nothing to do with the caregivers' contracting the COVID-19 virus.

One of the reasons why children are placed in children's homes is because their families may have failed to provide them with a safe environment. Their environments could be abusive and as an alternative, children's homes are meant to provide such children with a caring and safe, non-abusive environment. During the COVID-19 crisis, there have been global reports about a significant increase in domestic violence and children's homes have not been an exception as evidenced by the results of this study. Many participants voiced being abused by caregivers in several ways. Pereda and Diaz-Faes (2020) pointed out that while lockdowns were necessary to control the spread of the virus, this resulted in children being trapped in places where they were exposed to an increased risk of violence and abuse and were isolated from sources of help. This phenomenon is not new, as Attar-Schwartz (2011) in his study found that 29 % of adolescents living in residential care facilities reported being verbally abused while one-quarter experienced physical abuse. Thus, Jörg et al. (2020) argued that the COVID-19 pandemic brought an increased risk for domestic violence and child maltreatment. The authors further noted that this is more challenging for disadvantaged children. In this study, those in children's homes could have been more affected as they found themselves confined in the places where their caregivers were their abusers, and had no other place to escape to. Whereas before COVID-19 the participants may have been in contact with their abusive caregivers for limited periods as they would be at school for some of the time, the movement restrictions increased their exposure to their perpetrators (The Guardian, 2020). The results of this study reflect the negative events that happened in the caregivers' own families which then impacted how they handled the children in the children's homes. Given that the caregivers went home to their families when off duty and were also employees, they could have been experiencing family or work-life stressors which were taken out on the children. These are the events at the exosystem level that, for Bronfenbrenner, (1979) have indirect negative impacts on the child's development. Thus, this was a concerning situation as far as the safety of the children was concerned.

5.1. *Strengths and limitations*

The study was limited to one children's home which limits the generalisation of results to other contexts. However, the intention was to get an understanding of the participants' risks in this particular context rather than generalising the results. All participants were female which limited this study's results to female voices. Future studies could also include male perspectives and more homes in other contexts. Quantitative studies could be done to reach a bigger population and generalise the results. In terms of methods, only interviews were used to collect data; hence, no triangulation was done. This limitation was because of the limited time and access we had to the research site. Furthermore, the COVID-19 protocols required the wearing of masks during interviews, and this limited the researchers from reading some of the participants' facial expressions. Nonetheless, rich data were collected which gave a good understanding of the risks experienced by the participants during the pandemic. Our argument was also limited to the risks which excluded factors enabling the children to resile during COVID-19 as resilient factors were not in the scope of this study.

5.2. *Implications and future directions for the future*

Considering that participants exhibited poor coping mechanisms, disruptive behaviour and fear in times of the pandemic, there is a need for workshops on these aspects for children in children's homes. It seems that the children's homes mainly focus on the physical needs of the children and less on their psychosocial needs. Therefore, the need for psychosocial and emotional support is highlighted. Concerning the non-compliance with COVID-19 protocols, there is a need to teach children to develop a sense of agency when faced with similar situations. Furthermore, there is a need for adults to continually monitor children's behaviour that may put them at risk during the current pandemic to protect them from the effects of any similar crises or adversity in the future. The caregivers need to be trained on how to care for OVC to curb the prevailing abuse raised by the participants in this study. More research should be done to guide the different stakeholders in children's homes on how to function during a pandemic or any other crises to reduce the risks.

6. Conclusion

This study contributes to the body of knowledge on the risks experienced by children in children's homes during the COVID-19 pandemic and can be used as a basis for preparing for future pandemics or other crises. The study further reiterates the unsafe conditions existing in some children's homes which are supposed to be places of safety and shows that there is still much to be done in terms of ensuring the children's holistic wellbeing when they are placed in these homes. Therapy for the affected children needs to be in place and taken seriously as disruptive behaviour may be a reaction to the negative circumstances they are facing. COVID-19 intensified pre-existing risks, hence, failure to implement appropriate measures to assist these children may have resulted in further damage to them. This study is novel in this field as it attempted to close the gap in the knowledge of the risks for children in children's homes during the pandemic in South African township children's homes. It is hoped that the results of this study will inform the development of support programmes for OVC during COVID-19 and similar current and future crises.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

No data was used for the research described in the article.

References

Aldossari, M., & Chaudhry, S. (2020). Women and burnout in the context of a pandemic. *Gender, Work & Organization, 28*(2), 826–834. https://doi.org/10.1111/gwao.12567

Attar-Schwartz, S. (2011). Maltreatment by staff in residential care facilities: The adolescents' perspectives. *Social Service Review, 85*(4), 635–664. https://doi.org/10.1086/664009

Barter, K., 2013. Enough is enough: The time has come to build communities and not bureaucracies for the health, well-being and protection of children. International Child and Youth Care Conference, St. John's, NL, June 26-28.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. http://eprints.uwe.ac.uk/11735.

Bronfenbrenner, U. (1974). Developmental research, public policy, and the ecology of childhood. *Child Development, 45*(1), 1–5. https://doi.org/10.2307/1127743

Bronfenbrenner, U. (1994). Ecological models of human development. In M. Gauvain & M. Cole (Eds.), *International encyclopedia of education* (Vol. 3, 2nd ed., pp. 37-43.). Elsevier.

Buzzi, C., Tucci, M., Ciprandi, R., Brambilla, I., Caimmi, S., Ciprandi, G., et al. (2020). The psycho-social effects of COVID-19 on Italian adolescents' attitudes and behaviors. *Italian Journal of Pediatrics, 46*, 69.

Care Standards Act (2000). https://www.legislation.gov.uk/ukpga/2000/14/contents.

Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report, 21*(5), 811–831. https://doi.org/10.46743/2160-3715/2016.2337

Cerda, A., & García, L. Y. (2022). Factors explaining the fear of being infected with COVID- 19. *Health Expectation, 25*, 506–512. https://doi.org/10.1111/hex.13274

Chaturvedi, K., Vishwakarma, D. K., & Singh, N. (2021). COVID-19 and its impact on education, social life and mental health of students: A survey. *Children and Youth Services Review, 121*(C). https://psycnet.apa.org/doi/10.1016/j.childyouth.2020.105866.

Chawla, N., Tom, A., Sen, M. S., & Sagar, R. (2021). Psychological impact of COVID-19 on children and adolescents: A systematic review. *Indian J Psychol Med, 43*(4), 294–299. https://doi.org/10.1177/02537176211021789

Christner, N., Essler, S., Hazzam, A., & Paulus, M. (2021). Children's psychological well-being and problem behavior during the COVID-19 pandemic: An online study during the lockdown period in Germany. *PLoS One, 16*(6). https://doi.org/10.1371/journal.pone.0253473

Czeisler, M. E., Tynan, M. A., Howard, M. E., Honeycutt, S., Fulmer, E. B., & Kidder, D. P. (2020). Public attitudes, behaviors, and beliefs related to COVID-19, stay-at-home orders, nonessential business closures, and public health guidance–United States, New York City, and Los Angeles, May 5–12, 2020. *Morbidity and Mortality Weekly Report, 69*(24), 751–758. https://doi.org/10.15585/mmwr.mm6924e1.

Dukhi, N., Mokhele, T., Parker, W.-A., Ramlagan, S., Gaida, R., Mabaso, M., et al. (2021). Compliance with lockdown regulations during the COVID-19 pandemic in South Africa: Findings from an Online Survey. *The Open Public Health Journal, 14*, 45–55. https://doi.org/10.2174/1874944502114010045

Evans, G. W., Gonnella, C., Marcynyszyn, L. A., Gentile, L., & Salpekar, N. (2005). The role of chaos in poverty and children's socioemotional adjustment. *Psychological Science, 16*, 560–565. https://doi.org/10.1111/j.0956-7976.2005.01575.x

Goldberg, A., Brodzinsky, D., Singer, J., & Crozier, P. (2021). The impact of COVID-19 on child welfare-involved families: Implications for parent–child reunification and child welfare professionals. *Developmental Child Welfare, 3*(3), 203–224.

Guy-Evans, O. (2020, Nov 09). *Bronfenbrenner's ecological systems theory*. www.simplypsychology.org/Bronfenbrenner.html.

Haider, N., Osman, A. Y., Gadzekpo, A., et al. (2020). Lockdown measures in response to COVID-19 in nine sub-Saharan African countries. BMJ Global Health, 2020(5),1-10. doi:10.1136/ bmjgh-2020-003319.

Hanscombe, K. B., Haworth, C. M. A., Davis, O. S. P., Jaffee, S. R., & Plomin, R. (2011). Chaotic homes and school achievement: A twin study. *Journal of Child Psychology and Psychiatry, 52*, 1212–1220. https://psycnet.apa.org/doi/10.1111/j.1469-7610.2011.02421.x.

Hills, S., & Eraso, Y. (2021). Factors associated with non-adherence to social distancing rules during the COVID-19 pandemic: A logistic regression analysis. *BMC Public Health, 21*(352), 1–25. https://doi.org/10.1186/s12889-021-10379-7

Human Rights Watch (2014). *Abandoned by the state: Violence, neglect, and isolation for children with disabilities in Russian orphanages*. https://www.hrw.org/report/2014/09/15/abandoned-state/violence-neglect-and-isolation-children-disabilities-russian.

Jarynowski, A., Wójta-kempa, M., Płatek, D., & Czopek, K. (2020). Attempt to understand public-health relevant social dimensions of Covid-19 outbreak in Poland. *Society Register, 4*(3), 7-44. 10.14746/sr.2020.4.3.01.

Jörg, M., Vitiello, F. B., Plener, P. L., & Clemens, V. (2020). Challenges and burden of the Coronavirus 2019 (COVID-19) pandemic for child and adolescent mental health: A narrative review to highlight clinical and research needs in the acute phase and the long return to normality. *Child Adolescent Psychiatry Mental Health, 14*(20), 1–11. https://doi.org/10.1186/s13034-020-00329-3

Kaine, G., Greenhalgh, S., & Wright, V. (2022). Compliance with Covid-19 measures: Evidence from New Zealand. *PLoS ONE, 17*(2). https://doi.org/10.1371/journal.pone.0263376

Kufa-Chakezha, T., Cohen, T., & Walaza, S. (2021). *Covid-19 in children: The South African experience and way forward.* https://www.wits.ac.za/covid19/covid19-news/latest/covid-19-in-children-the-south-african-experience-and-way-forward.html.

Lancet Institutional Care Reform Commission Group. (2020). The implications of COVID-19 for the care of children living in residential institutions. *The Lancet Child & Adolescent Health, 4*, 12. https://doi.org/10.1016/S2352-4642(20)30130-9

Man, M. A., Toma, C., Motoc, N. S., Necrelescu, O. L., Bondor, C. I., Chis, A. F., et al. (2020). Disease perception and coping with emotional distress during COVID-19 pandemic: A survey among medical staff. *International Journal of Environmental Research and Public Health, 17*(13), 4899. https://doi.org/10.3390/ijerph17134899

Maxwell, J. (2013). *Qualitative research design: An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.

Merriam, S. B. (2002). Basic interpretive qualitative research. In S. B. Merriam (Ed.), *Qualitative research in practice* (pp. 37–39). San Francisco, CA: Jossey-Bass.

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass.

Muchenje, R. (2014). *Children's rights in Zimbabwe: An analysis of how the state seeks to protect children's rights*. www.jesuitszimbabwe.co.zw.

Nivette, A., Ribeaud, D., Murray, A., Steinhoff, A., Bechtiger, L., Hepp, U., et al. (2021). Non-compliance with COVID-19-related public health measures among young adults in Switzerland: Insights from a longitudinal cohort study. *Social Science & Medicine, 268*, Article 113370. https://doi.org/10.1016/j.socscimed.2020.113370

Ornell, F. (2020). "Pandemic fear" and COVID-19: Mental health burden and strategies. *Brazilian Journal of Psychiatry, 42*(3), 232–235. https://doi.org/10.1590/1516-4446-2020-0008

Oruche, U. M., Draucker, C. B., Al-Khattab, H., Cravens, H. A., Lowry, B., & Lindsey, L. M. (2015). The challenges for primary caregivers of adolescents with disruptive behavior disorders. *Journal of Family Nursing, 21*(1), 149–167. https://doi.org/10.1177/1074840714562027

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health, 42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Thousand Oaks, CA: Sage.

Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report, 20*(2), 76–85. https://doi.org/10.46743/2160-3715/2015.2097

Pereda, N., & Diaz-Faes, D. A. (2020). Family violence against children in the wake of COVID-19 pandemic: A review of current perspectives and risks. *Child Adolescent Psychiatry Mental Health, 14*(1), 1–40. https://doi.org/10.1186/s13034-020-00347-1

Pillay, J. (2016). Problematising child-headed households: The need for children's participation in early childhood interventions. *South African Journal of Childhood Education, 6*(1), a359. http:// dx.doi.org/10.4102/sajce. v6i1.359.

Pinheiro, P. S. (2006). *World report on violence against children.* United Nations.

Raman, S. V., Hor, K. N., Mazur, W., He, X., Kissel, J. T., Smart, S., et al. (2017). Eplerenone for early cardiomyopathy in Duchenne muscular dystrophy: Results of a two-year open-label extension trial. *Orphanet Journal of Rare Diseases, 12*(1), 1–5. https://doi.org/10.1016/s1474-4422(14)70318-7

Recio-Vivas, A. M., Font-Jiménez, I., Mansilla-Domínguez, J. M., Belzunegui-Eraso, A., Díaz-Pérez, D., Lorenzo-Allegue, L., et al. (2022). Fear and attitude towards SARS-CoV-2 (COVID-19) infection in Spanish population during the period of confinement. *International Journal of Environmental Research and Public Health, 19*(834), 1–15. https://doi.org/10.3390/ijerph19020834

Republic of South Africa (1983). The South African Children's Act 74 (as amended by Act, 86 of 1991). *Government Gazette*, no. 8765. Cape and Transvaal Printers for Government Printers.

Romero, E., López-Romero, L., Domínguez-Álvarez, B., Villar, P., & Gómez-Fraguela, J. A. (2020). Testing the effects of COVID-19 confinement in Spanish children: The role of parents' distress, emotional problems and specific parenting. *International Journal of Environmental Research and Public Health*, *17*(19). 10.3390/ijerph17196975.

Roy, S. (2021). Restructuring institutional care: Challenges and coping measures for children and caregivers in post-COVID-19 era. *Institutionalised Children Explorations and Beyond, 8*(1), 65–78. https://doi.org/10.1177/2349300320973825

Spiegel, P. B. (2004). HIV/AIDS among conflict-affected and displaced populations: Dispelling myths and taking action. *Disasters, 28*(3), 322–339.

Spinelli, M., Lionetti, F., Pastore, M., & Fasolo, M. (2020). Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy. *Frontiers in Psychology, 11*, 1713. https://doi.org/10.3389/fpsyg.2020.01713

Statistics SA (2019). *Cape town: Data first*. 10.25828/9tmn-fz97.

The Guardian (2020, March 28). *Lockdowns around the world bring rise in domestic violence.* https ://www.theguardian.com/socie ty/2020/mar/28/lockdowns-world -rise-domestic-violence.

UNICEF (2010). The children left behind: A league table of inequality in child well-being in the world's rich countries. *Innocenti Report Card*, *9*. UNICEF Innocenti Research Centre.

UNICEF (2011). *UNICEF annual report 2011*. http://www.unicef.org/nutrition/files/UNICEF_Annual_Report_2011_EN_060112.pdf.

UNICEF (2022). *Number of COVID-19 orphans nears 150,000 in South Africa*. https://www.unicef.org/southafrica/press-releases/number-covid-19-orphans-nears-150000-south-africa.

United Nations (1989). Convention on the rights of the child. *United Nations Treaty Series*, *1577*, 3-178. https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-14%20AM/Ch_IV_11p.pdf.

Veijalainen, J., Reunamo, J., Sajaniemi, N., & Suhonen, E. (2019). Children's selfregulation and coping strategies in a frustrated context in early education. *South African Journal of Childhood Education, 9*(1), Article a724. https://doi.org/10.4102/sajce.v9i1.724

Wilke, N. G., Howard, A. H., & Goldman, P. (2020). Rapid return of children in residential care to family as a result of COVID-19: Scope, challenges, and recommendations. *Child Abuse & Neglect, 110*, Article 104712. https://doi.org/10.1016/j.chiabu.2020.104712

Windarwati, H. D., Ati, N., Paraswati, M. D., Ilmy, S. K., Supianto, A. A., Rizzal, A. F., et al. (2021). Stressor, coping mechanism, and motivation among health care workers in dealing with stress due to the COVID-19 pandemic in Indonesia. *Asian Journal of Psychiatry, 56*, 1–4. https://doi.org/10.1016/j.ajp.2020.102470

Wong, C. A., Ming, D., Maslow, G., & Gifford, E. J. (2020). Mitigating the impacts of the COVID-19 pandemic response on at-risk children. *Pediatrics, 145*(4), 20200973. https://doi.org/10.1542/peds.2020-0973

Wyk, V., Bradshaw, D., Groenewald, P., Seocharan, I., Manda, S., Roomaney, R., et al. (2020). COVID deaths in South Africa: 99 days since South Africa's first death. *South African Medical Journal, 110*(11), 1093. https://doi.org/10.7196/SAMJ.2020.v110i11.15249