Youth mental health in the context of COVID-19 in East and Southern Africa: A desk review

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This work was implemented within a consortium in EQUINET working on youth mental health and COVID through Training and Research Support Centre (TARSC), the International Working Group for Health Systems Strengthening (IWGHSS) and, in the pra4equity and PAROnline network, Country Minders for Peoples Development (CMPD), Malawi, and the Centre for Youth Driven Development Initiative (CFYDDI), Uganda.

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Executive Summary

This desk review reports available published information relating to youth mental health in east and southern Africa (ESA). It was implemented within and informs collaborative work on youth mental health in the region in EQUINET between Training and Research Support Centre (TARSC), the International Working Group for Health Systems Strengthening (IWGHSS) and the pra4equity and PAROnline network, specifically Country Minders for Peoples Development (CMPD), Malawi, and the Centre for Youth Driven Development Initiative (CFYDDI), Uganda.

The desk review explored patterns and determinants of youth mental health in the region; how the coronavirus (COVID-19) pandemic and responses to it have affected this; where youth seek and obtain support for mental health needs and the perceived challenges and gaps. It presents recommendations for improving the responses to mental health challenges.

The desk review is based on peer reviewed articles and other reports in English providing qualitative and quantitative evidence on youth mental health pre and post COVID-19 (2017-2021) in east and southern Africa. A search term strategy was used to obtain papers from online databases in PubMed, Scopus and EBSCOhost and specific filters were used to include papers that were relevant to the thematic and geographical areas covered in the work and for youth aged 18-29 years. There were limitations in the inconsistency of definitions and terms used in the papers found, papers focused on particular ESA countries, particularly South Africa, while no published evidence on the topic was found in 9 ESA countries (Angola, Botswana, DRC, Lesotho, Madagascar, Mozambique, Namibia, Swaziland and Zambia). There was even more limited published evidence on youth mental health and COVID-19.

The paper presents commonly reported forms mental illness experienced by youth. The most prevalent mental conditions includes; depression, anxiety, post-traumatic stress disorder, general anxiety and harmful substance use. The factors affecting this included socioeconomic challenges, stress, relations with parents, loneliness, low self-esteem, demands of student life and poor sleep quality. Gender and socioeconomic inequalities and poverty exacerbated these factors. Young women were reported to have a higher prevalence of mental illness than young men, although it is also noted that mental illness is often under-reported in young people.

The COVID-19 lockdown and social distancing measures led to difficulties, with online learning and loss of work and rising costs intensifying some factors and increasing mental stress, as well as suicidal ideas and substance and alcohol abuse among youth. The studies did not provide a clear picture of the scale of increase and this remains relatively under-reported.

The stigma around mental illness is reported to discourage youth in the region from seeking mental health services, while social support is noted to reduce this stigma. However, youth-friendly mental health services are also noted to be limited, and many young people in the region are reported to rely on parental support and social support from family and friends. There is report of youth using counselling services, psycho-education and cognitive behavioural therapy and different forms of art therapy and meditation practices providing. Online resources for mental health such as virtual counselling, tele-counselling and digital applications to deal with drivers of stress and improve wellbeing are gaining popularity.

Youth mental health is a pertinent issue for the ESA region, more so due to the impact of the pandemic, but is not well recognised by formal services and policy. Published reports point to inadequate training mental health in service providers, limited accessible youth-friendly mental health services, costs and digital barriers to accessing online resources, especially during the pandemic, and limited information outreach of where to seek help. Recommendations include building partnerships across diverse stakeholders; investing in peer and psychosocial support; including mental health in curricula; and reducing cost barriers to digital access for online interventions. The review evidence points to a need, intensified by COVID-19, to co-create with young people strategies for preventing and responding to youth mental illness and its drivers and consequences.

1. Introduction

The term 'youth' covers a time of transformation from childhood dependency to adulthood's independence. It is defined by the United Nations and the World Health Organization (WHO) as covering people aged 15 to 24 years (UNDESA, 2013, WHO, 2021a). In sub-Saharan Africa, however, national policies extend youth to ages 30 to 40 years. For example, in Kenya, the 2019 Youth Development Policy refers to youth from 18 to 34 years (MolSDYA, 2019). Africa is the world's youngest continent, with 70% of its population being under the age of 30 (Kariba, 2020, Chikowitz, 2020). Youth comprise around 20% of the total ESA population and are the fastest growing share of the general population in that region (AIDP, 2018; UNFPA, 2021).

Mental health in youth needs attention both for its impact and because young people are the next generation for ESA countries (UNICEF, 2000). Globally, it is estimated that 15-24 year olds account for 2-25% of the total burden of mental illness (Patel et al., 2007). Globally, youth are reported to commonly experience depression, anxiety, psychosis, schizophrenia, bipolar disorder, alcohol and substance dependence, and suicide (WHO, 2020). The 18-29 year age group is reported to be when the majority of mental health issues emerge. Research indicates that 50% of mental health disorders develop by the age of 14 years and 75% by 24 years of age (Kessler et al., 2005). Yet, adolescents and young adults also avoid addressing their mental health issues, negatively affecting them as they enter into adulthood, including in terms of their health, education, family relations and economic situation (Sankoh et al., 2018). While Spence et al. (2016) suggest that positive coping mechanisms can encourage young people to seek help for their mental health help seeking behavior, the global evidence suggests the need for more focus on youth mental health in Africa, including in how the COVID-19 has affected this.

By May 2021, Africa had recorded 3.3 million confirmed cases and 84 000 people had died from COVID-19 (WHO, 2021b). The pandemic and responses to it are reported to have increased levels of stress and anxiety, compounded by social isolation, working disruptions, loneliness and quarantine, all of which impact on mental health (Frasquilho et al., 2016, Forbes and Krueger, 2019). The restrictions related to COVID-19 meant that youth in education were forced into online learning environments, studying alone, without meeting peers. Those in the 24-29 year age group faced job insecurity and job loss, or had to work from home (Cacioppo et al., 2010). These factors are reported to have had psychosocial and mental health consequences (Reger et al., 2020; OECD, 2020).

In the Regional Network for Equity in Health in east and southern Africa (EQUINET), a network of communities, health workers and civil society implementing participatory action research (PAR) online in 2019 identified youth mental health as a critical issue that demanded further exploration, particularly from a youth lens. As a result a multi-methods programme was initiated to better understand inequities in the experience of and responses to youth mental health, led by Training Research Support Centre (TARSC), with the International Working Group for Health Systems Strengthening (IWGHSS) and the pra4equity and PAROnline network, specifically Country Minders for Peoples Development (CMPD), Malawi, and the Centre for Youth Driven Development Initiative (CFYDDI), Uganda. This desk review was commissioned as part of this EQUINET multi-methods programme to inform the collaborative work.

Objectives:

The desk review aimed to report the findings from published literature on the mental health of youth in ESA the region and particularly:

- a. Young people's experiences of mental health and disorders and how these have changed since the COVID-19 pandemic.
- b. The factors driving and impact of this pattern of mental health problems.
- c. The measures and services available and used to promote mental health and address mental health disorders, together with the challenges and gaps.
- d. Recommendations from young people and others for improvements in prevention and management of youth mental health.

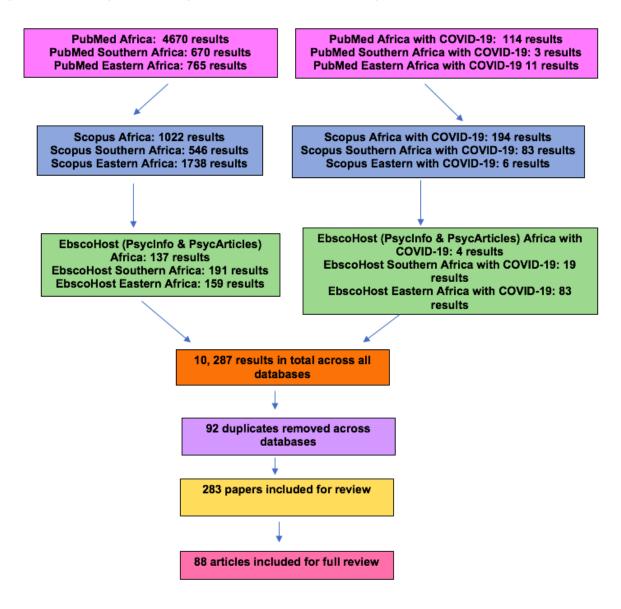
The countries covered are the 16 ESA countries in EQUINET, that is Angola, Botswana, DRC, Kenya, Lesotho, Madagascar, Malawi, Mozambique, Mauritius, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zimbabwe, Zambia, and the regional organisations: Southern Africa Development Community (SADC), East African Community (EAC) and East Central and Southern Africa Health Community (ECSA HC). The desk review is one of the few reviews focusing on how the youth have been impacted by the COVID-19 pandemic in the ESA region.

2. Methods

A librarian assisted to develop the search strategies for the desk review. The databases searched were PubMed, Scopus and EBSCOhost (PsycInfo and PsycArticles), as well as online resources such as; websites, blogs and opinion pieces. The searches included quantitative and qualitative evidence on youth mental health and interventions for the 18-29 year age group as inclusion criteria. Documents covering children below the age of 15 years were not included. Search terms were used for, and studies included that covered one or more of the themes noted in the objectives which focused on themes around, specifically m-health interventions.

A rigorous search strategy was used, implemented in three stages, as shown in Figure 1.

igure 1: Flow diagram showing the search and review strategy



Firstly searches used the terms for youth, young adult, adolescence, and university and college students. Secondly, searches within this mental health and mental illness, and the geographical scope was used to search papers within this for Africa, and then for individual ESA countries. The time frames – 2017-2021 - were used as further filters to cover pre COVID-19 (2017-2020) and post COVID-19 (2020-2021). Papers were excluded if they covered countries outside Africa, unless this was part of a multi-country reporting that included ESA countries, and if they did not cover the age group . 18-29 years.

Duplicates were removed manually by review of headings and abstracts. Where there were significant data gaps, some papers were then included from African countries outside the ESA to raise issues that may need to be considered for the region. A data extraction table was used to extract the information from these studies. The search strategy is shown in *Figure 1*. The full set of papers is shown in the reference list, and the Table in *Appendix 1* exemplifies the data extracted specifically for individual ESA countries. The review was written according to 4 main themes outlined in the objectives.

As a desk review using secondary published evidence no ethical procedures or approval was needed.

Limitations

We recognised various limitations. With much youth mental health unreported we recognise that the papers found probably represent a small share of what is actually taking place, and may be biased towards more severe or acute disorders or those that have led to more extreme loss of functioning.

There was a variation in the age ranges considered to be youth, as noted earlier. We used the agreed range of 18-29 years for this work, in part given the more stringent ethical and complex design considerations when including younger age groups for later primary work in the multimethods programme that this review intends to contributes to. The inclusion of blogs, websites and opinion pieces were sources using search engines such as google search, beyond the searches in databases using the structured staged search terms.

There was an unequal distribution of papers from different ESA countries, with most originating from a few countries. Larger clusters of papers were found in South Africa (19) and Tanzania (7). No papers were found that covered: Angola, Botswana, DRC, Lesotho, Madagascar, Mozambique, Namibia, Swaziland and Zambia. With COVID-19 an emergent issue, there were limited studies on its impact on youth mental health.

3. Findings

3.1. Patterns and determinants of youth mental health in ESA countries

The most prevalent mental conditions reported among youth include; depression, anxiety, post-traumatic stress disorder, general anxiety and harmful substance use (Otiende et al., 2017: Mitiku Teshome et al., 2020; Reta et al., 2020; Zenebe and Necho, 2019: Bandy et al., 2020). Mental disorders were found to be prevalent in university students in the ESA region, with estimates of between a third and a half affected (Kerebih et al., 2017, Tesfahunegn and Gebremariam, 2019, Bedaso et al., 2020, Mall et al., 2018; Mekuriaw et al., 2020; Kelemu et al. (2020). Mental disorders were further exacerbated by harmful coping mechanisms or responses used to seek relief from psychological distress, including truancy and harmful substance use, such as of cannabis, alcohol, khat and other proactive substances (Hersi et al., 2017; Hook et al., 2020). Bedaso et al. (2020) thus noted substance abuse to be a strong predictor of mental distress. The substances abused include

Young women were reported to be more prone to common mental disorders than their male counterparts (Chigerwe et al., 2020: Hersi et al., 2017; Liu et al., 2017; Tsegay et al., 2021), with one study finding female youth in university two times more likely to suffer mental distress than their male counterparts (Tessema et al. 2019). Youth in their firstand second years of university

were reported to have six to seven times more mental illness, and studying in health-related fields was ironically was also noted to have a higher prevalence of disorders (Mitiku Teshome et al., 2020; Nwachukwu et al., 2021).

Factors affecting youth mental health

A range of social determinants appeared to increase the risk of mental illness, deriving from the socioeconomic and psychosocial conditions that young people live in. Poverty was commonly associated with poorer mental well-being among youth (Hatcher et al., 2019a; Hook et al., 2020; Gibbs et al., 2018; Hall et al., 2019; Mbuthia et al., 2018). In Malawi, Ghana and Tanzania poverty related stressors such as lack of basic needs due to low-incomes and poor housing were further worsened by environmental stressors such as; violence, insecurity, unintended pregnancies and death of parent or guardian (Hall et al., 2019). Living in informal settlements in South Africa was also noted to be associated with mental illness due to fast alterations in social structures and economic pressures (Hatcher et al., 2019a). A similar cluster of unemployment, low incomes, poor living conditions, crime and insecurity being linked to mental illness in youth was found in other countries in the ESA region (Van der Walt et al., 2019; Chigerwe et al., 2020; Mokona et al., 2020; Somefun and Simo Fotso, 2020). Conversely, Somefun and Simo Fotso (2020) observed that higher family income levels reduced the probability of depression.

Various studies indicated negative mood symptoms to be linked to stigma against mental health issues in youth (Pederson et al., 2020; Bantjes et al., 2020; Shehata and Abdeldaim, 2020). Shehata and Abdeldaim (2020) highlighted how youth with mental distress faced greater levels of stigma compared to those with physical disorders. Exposure to the issue appears to play a role, with one study finding of pharmaceutical students having more negative perceptions of mental illness than medical students attributed to the latter having more exposure to those affected (Shehata and Abdeldaim, 2020).

A range of determinants from individual to family and social level were reported. Youth were also found to have a higher risk of mental illness if there were mental disorders among their relatives, although this maybe attributable to contextual and environmental factors affecting families, such as lack of social support, increased levels of stress and low socioeconomic status (Reta et al., 2020; Hersi et al., 2017; Kebede et al., 2019; Tsegay et al., 2021; Mall et al., 2018). Being sexually or emotionally abused during childhood was reported to have a significant impact on students' mental health in later years, and to lead to negative self-esteem (Myers et al., 2021). Interpersonal violence was associated with increased mental illness in rural South African women, compounding other household and contextual stresses (Manyema et al., 2018).

Young people face difficulties in coping with stressful environments and life events were found to experience a range of factors that further worsen their mental health. These included poor sleep quality, financial stress, high daily internet use, harmful drug use, and experience of other chronic illnesses (Haile et al., 2017; Tesfaye Kelemu et al., 2020; Seun-Fadipe and Mosaku, 2017; Ngasa, 2017; Elsawy, 2020; Hersi et al., 2017; Njuwa, 2020; Tsegay et al., 2021; Lugata et al., 2020). Poor mental health due to difficulties in adjusting to stressful situations earlier in their youth was found in rural and university students, sometimes expressed as loneliness and withdrawal from social interaction (Pillay et al., 2020). Low mood, negative self-talk and low self-esteem were also reported, negatively affecting students' academic work (Pillay et al., 2020).

Some youth were reported to perceive their mental illness as being a result of or elevated by supernatural causes (Pederson 2020). Conversely, faith-based practices with young people, such as prayers and counselling, were shown to decrease stigma related to mental health and to reduce ideas of suicide in southern Africa (Pederson et al., 2020, Alabi et al., 2021).

3.2 Support and services for youth mental health

Despite the reported prevalence of mental health challenges among youth in ESA countries, formal help seeking behaviour is low and support is more commonly sought from informal sources, such as talking to parents, partners, religious leaders and friends (Gebreegziabher et al., 2019), with some report (in Nigeria so outside the ESA region) of praying or seeking spiritual

counselling when youth felt depressed, anxious or had suicidal ideation (Pederson et al., 2020). One of the reported challenges was the lack of existence of or awareness amongst youth of where to find existing mental health services or youth-friendly centres in their localities (Gebreegziabher et al., 2019). Negative perceptions of capacities in primary health care facilities for this form of support were noted (van de Water et al., 2018). Clinical psychiatric rotations were shown to address this in one South African study (De Witt et al., 2019).

Other barriers included young people's denial of mental health problems, assumptions that such problems would go away without intervention and recourse to other means of coping (Negash et al., 2020). Help is thus reported to be mostly sought during a mental health crisis, as a result of and also intensifying stigma, and negative perceptions of primary health care facilities (van de Water et al., 2018). Clinical psychiatric rotations were shown to assist students with their mental health in a South African study (De Witt et al., 2019).

Providing psychosocial care and mental health promotion to support youth mental health can help prevent psychopathology and promote physical health (Orth and van Wyk, 2020). Social support can create strong relationships between youth (Hadebe and Ramukumba, 2020; Lugata et al., 2020; Tsegay et al., 2021; Kebede et al., 2019; Pederson et al., 2020). Caring adults have also played a key role in motivating the youth to access care (van de Water et al., 2018). This type of mental health support can come in the form of family and friends. Positive social support was experienced by youth in the form of compassion, tolerance, understanding and empathy from family and friends among youth (Hadebe and Ramukumba, 2020; Lugata et al., 2020; Kebede et al., 2019). In contrast, youth who portrayed their relationship with family and friends as unsupportive were reported to have lowered self-esteem. Threats to social connectedness, such as loneliness and rejection, were also reported to worsen mental health (Lugata et al., 2020; Kebede et al., 2019; Tsegay et al., 2021).

While formal care services were noted as inadequate, a variety of other services aimed at supporting youth mental health were reported. Psycho-education was offered in different settings, such as among refugee youth with previous traumatic experiences. Psycho-education is the practice of informing and discussing with individuals and their caregivers the nature of the illness, including its likely causes, progression, consequences, prognosis, treatment and alternatives (Im et al., 2018). This approach has shown significant decrease in post-traumatic stress disorder symptoms, and increase in perceived social support and self-awareness of trauma responses among Somali refugee youth in Kenya (Im et al., 2018). Youth involvement in peer support and in youth therapy has been adapted by the Friendship bench in Zimbabwe. In this programme, trained university students referred to as 'buddies' provide brief psychosocial therapy based on cognitive behavioural therapy. This is offered in schools and community settings and links peer support groups with social activities such as dance and football (Wallén et al., 2021).

Relaxation techniques have been used as a form of therapy to assist youth with their mental health. Bandy et al. (2020) found that transcendental meditation decreased post-traumatic stress disorder and depression symptoms within 15 days, when practiced regularly. Other relaxation methods used include deep breathing and inclusion of mindfulness-based interventions and activities to cope with distress (Chigerwe et al., 2020).

Various forms of art therapy have been used to promote and create awareness on mental health. In South Africa, the art of Bonsai is practiced as a group art therapy in Kwazulu natal among traumatized youth (Hermann, 2021). This is a therapy tool using nature and tree planting in the storytelling of a participant's experience, using the symbolism of the tree to understand problems, their causes and actions (Buchalter, 2004). Bonsai is noted to be beneficial as a healing mental health tool when employed as art therapy and can be promoted in a group setting in potential rehabilitation situations (Hermann, 2021). In Zimbabwe, drama competitions are being tested by Zimbabwe Early Intervention in Psychosis (ZimEIP) project as a tool to tackle mental health stigma, by creating open discussion platforms on psychosis treatment and providing insight into community expectations from the research studies (Gudyanga et al., 2021).

Online resources supporting youth mental health.

Youth are amongst Africa's top social media users, particularly those from Kenya, Nigeria, Egypt and South Africa (KPA, 2020). In one survey, 86% of Africans aged between 18-24 years own a smartphone and nearly 90% use it for social media for three or more hours daily (Chikowitz, 2020). The most common social media apps were WhatsApp, Facebook, YouTube, Google+, Instagram, Twitter, Yahoo, Linked-in and Snapchat, with different levels of popularity of the apps in different countries. The main motivation for use of social media was to acquire information, entertainment, to maintain an identity and escape social realities (KPA, 2020).

Young people have also been found to seek information to improve their mental health by learning about stress reduction, relaxation and positive thinking (CitiesRISE, 2020), particularly through mobile phone and information and prevention methods for mental health. A preference for obtaining information via text messages was largely due to availability of airtime and costs of data, and a note of airtime bonuses and browsing modes being more available at night (Kola et al., 2021).

CitiesRISE is a multi-stakeholder project that challenges cities around the world to increase opportunities for coping, connectedness, and access to a nurturing environment for young people in order to turn the tide on mental health and wellness (CitiesRISE, 2020). It offers different webinars, awareness campaigns and peer support groups through telehealth or virtual platforms. While reporting that Nairobi youth were more likely to seek professional mental health support than respondents in Bogota, Chennai, Sacramento and Seattle, a CitiesRISE survey reports that most young people in Nairobi would like to receive mental health support through video counselling, tele-counselling, digital applications and group counselling in descending order of popularity (CitiesRISE, 2020). In Nairobi, CitiesRISE has thus held virtual buddy groups and zoom meetings as digital opportunities to communicate, share and remain socially connected, including despite the physical distancing under COVID-19 (CitiesRISE, 2020). This is further discussed in the next section (Section 3.3) on COVID-19.

Toll free telephone helplines have become a further resource for youth seeking mental health support. For example, the South African Depression and Anxiety group (SADAG) is a Non-Profit Organization leading mental health service user advocacy across South Africa. SADAG has different helplines that cater to different population groups including teens, adolescents and youth. They also have a helpline dedicated to university students in South Africa. These allow accessibility of mental health services in crisis and emergency settings without the constraints of airtime or lack of a smart phone (SADAG, 2021). The helplines provide counselling and referral support through a comprehensive database of healthcare facilities, healthcare practitioners, rehabilitation centres, social workers and mental health professionals throughout South Africa (SADAG, 2021).

One of the major challenges in using online resources for mental health is the issue of fake news. Incorrect information posted on social media was noted to multiply stress and anxiety, especially in youth who rely on social media as their top source of news. During the COVID-19 pandemic for example, fake news was common and mental health issues were further heightened, with youth indicating an inability to verify the information due to isolation measures (Wamuyu, 2020, Chikowitz, 2020). This, and the measures to overcome it is further discussed in the next section on the impact of COVID-19.

3.3. The impact of COVID-19 on youth mental health

The scale and impact of the COVID-19 pandemic globally and in Africa is more fully described elsewhere (WHO, 2021b,c). Within Africa, South Africa has been most heavily affected in the ESA region, but all ESA countries have experienced cases and deaths in multiple waves from COVID-19 (WHO, 2021c). In response to the pandemic, the different governments instituted various measures, including 'lockdowns' that involve school closures, workplace closures, cancellation of public events, restrictions on public gatherings, closures of public transport, stay-at-home requirements, public information campaigns as well as restrictions on internal movements and international travel controls (Roser et al., 2020).

COVID-19 and the responses to it are reported to have led to psychosocial and emotional problems in sub-Saharan Africa, including for youth, despite having lower reported case and mortality rates when compared to the global north (Langsi et al., 2021). This has exacerbated their pre-existing vulnerabilities, especially in terms of anxiety and stress, and has limited access to youth-friendly health and education services and peer networks (Banati et al., 2020). Stresses related to loss of work and incomes, lack of peer contact due to social distancing, increased demands on home care stress and issues with poor social support related to the pandemic have all increased mental distress in youth (El-Zoghby et al., 2020, Oppong Asante et al., 2020).

Factors raised earlier made some young people more susceptible to these stresses. They include being female, being in early years of higher education, having a family history of mental illness and harmful substance use (Mudiriza and LAnnoy, 2020; Ghazawy et al., 2020; Aylie et al., 2020; El-Monshed et al., 2021). However, the most commonly reported factor raising mental illness during the pandemic related to physical distancing measures that meant that young people had to stay at home and were isolated from friends, especially where online resources provided the only form of social interaction (Aylie et al., 2020; Oppong Asante et al., 2020). Students living away from home during lockdowns experienced feelings of loneliness (Padmanabhanunni and Pretorius, 2021; Aylie et al., 2020). On the other hand, living at home in crowded urban areas with families raised fears of not being able to practice physical distancing and of families contracting COVID-19 due to their contracting it from friends (Mekonen et al., 2021). Young people with stronger self-confidence and lower anxiety were reported to be less prone to loneliness, depression and hopelessness and to have a better quality of life during the pandemic, but also to be more likely to take risks during the pandemic (Padmanabhanunni and Pretorius, 2021; Cowden et al., 2017).

The disruption of peer support networks due to physical distancing was reported to exacerbate youth anxieties and depression (Oppong Asante et al., 2020). In response, there is report of young people resorting to rising levels of harmful substance use, despite the closure of bars and restaurants, through local traditionally brewed alcohol (Sinclair et al., 2020). Young people are also reported to have practiced excessive television watching and binge eating (Matovu et al., 2021). Youth experienced anxiety around COVID-19-related symptoms such as fever, cough and sneezing, found also in other respiratory conditions (Ghazawy et al., 2020, Abas et al., 2021) School closures meant that adolescent girls faced increased demand to help with domestic chores and increased their risk of unwanted sexual attention and a rise in domestic gender-based violence (ACFP, 2020). Curfew measures hindered young people from seeking help after assaults, and left them stuck with their perpetrators in their homes.

Economic and financial issues became a significantly greater challenge (El-Zoghby et al., 2020; Matovu et al., 2021). Youth unemployment rose, adding to household debts, rent arrears, debts with local shopkeepers and exhaustion of savings, poorly replaced by scarce social transfers (Somefun and Simo Fotso, 2020). These hardships were reported to lead to ideas of suicide in young people, as well as increased use of alcohol and drugs to escape the pandemic pressures and fatalistic thinking (El-Zoghby et al., 2020; El-Monshed et al., 2021).

There were also positive coping mechanisms reported, including youth volunteering at foodbanks, art entertainment and finding new hobbies such as photography, meditation or dance to improve their own and others' mental health and wellbeing and to raise awareness of COVID-19 (Banati et al., 2020). For example in South Africa, the Ndhlovu Youth Choir composed and performed music to communicate the WHO COVID-19 advice (Wickramanayake, 2020; NdlovuYouthChoir, 2020). Throughout Africa, young people produced and distributed masks using available resources such as Kente cloth, Ankara fabrics, Capulana textiles (Honwana and Honwana, 2020). They came together to organise and lead campaigns, initiatives and organisations to promote access to preventive health services. For example, in Nairobi, a youth-led organization called Garden of Hope raised money to ensure set up of handwashing stations in a Kibera slum. They connected with their communities and local leaders to provide support and services as well as to support families in distress (Honwana and Honwana, 2020). As noted earlier, also in Nairobi, CitiesRISE produced leaflets on mental health topics for young people,

and held virtual buddy groups and online meetings to communicate, share and remain socially connected, including despite the physical distancing under COVID-19 (CitiesRISE, 2020). Their platforms created a forum for youth to share their stories about their experiences of the pandemic, and brought professional expertise into weekly webinars to engage with young people on how to support each other and their communities during the pandemic (CitiesRISE, 2020).

The 'fake news' challenge noted earlier was intensified during the pandemic, termed the 'coronavirus infodemic', heightening anxiety as youth were unable to verify the information due to their isolation (Wamuyu, 2020, Chikowitz, 2020). Despite this, there are examples of youth coming together to form online groups for positive change. For example, youth in Zimbabwe developed an initiative during the pandemic to challenge the fake news around COVID-19. A team of 20 Zimbabwean youth working with the development charity Voluntary Service Overseas used social media and radio shows to dispel myths relating to COVID-19, reaching an estimated 100 000 people in 2020 (Harrisberg and Ndhlovu, 2020).

3.4 Proposals made for improving responses to youth mental health

Various strategies have been proposed to prevent mental disorders and promote mental wellbeing among young people. Mokona et al. (2020) and CitiesRISE (2020) propose that future guidelines tackle youth unemployment, youth empowerment and public health messaging tailored to youth, and raise community awareness to prevent stigma and discrimination around mental disorders (Davids et al., 2019).

Mall et al., (2018) recommend that university students as one at risk group be given psychosocial support, with the aim of increasing their own agency and coping strategies and for youth to provide support to their peers (Eloff and Graham, 2020). Through supportive interventions patterning state, non-state agencies and health providers and through peer support, measures are proposed to address sleep patterns and quality; to hold campaigns to tackle stigma and to ensure early screening to identify risks for and attempts of suicide (Mall et al., 2018, Haile et al., 2017, Tesfaye Kelemu et al., 2020; Tsegay 2021). It is proposed that early screening, educating students on mental health and mindfulness-based stress reduction interventions are included in education curricula to expose students to options they can use (Pillay et al., 2020; Chigerwe et al., 2020). Research is suggested that could explore the role of early life course factors, like childhood trauma, and more recent stressors like violence and harmful substance use in positive and negative mental health outcomes to better prevent and manage them (Mall et al., 2018; Manyema et al., 2018).

In relation to COVID-19, Myers et al. (2021), propose improving youth mental health through self-guided internet-based interventions particularly those that are based on cognitive behavioural therapy. This is an evidence-based approach for addressing the traumatic stress that arises from experiences of maltreatment and from internalising external traumas to generate disorders. Banati et al. (2020) suggested incorporating COVID-19 interventions into virtual platforms to reach more young people, and to use community-based models of service delivery adapted to local cultures, while adhering to the COVID-19 guidelines.

For online resources and interventions to have effect, Kola et al. (2021) observed that provisions must be made to ensure the data for digital access, as most youth cannot afford the cost of this. While this was focused on university students, it is likely to be even more the case for the large majority of low income young people. Further research with youth could identify the potential for uptake of mHealth interventions on smartphones for offline use. One example of this is an app called the mental health Global Action Intervention Guide app,developed by the WHO (Socias, 2021). This app provides support to those with mental health issues and clinical care options (Socias, 2021). Kola et al. (2021) suggest that mHealth interventions that take the form of text messages are preferred, as they use less data. Youth access to and ownership of smart phones, particularly those in informal settlements or lowest income households is a further barrier that needs to be overcome in any future digital interventions.

4. Discussion

These findings in the ESA region confirm evidence found in Africa, and more generally at international level. This includes the finding of common mental health conditions among youth being depression, anxiety, post-traumatic stress disorder, generalised anxiety disorder and harmful substance use related disorders (Zenebe and Necho, 2019; Otiende et al., 2017). Gender, socioeconomic determinants and poverty were identified in this review as key drivers of poor mental health. University students, particularly those in health sciences and suffering poor sleep quality, financial issues, poor living conditions and academic stress are also found to experience mental distress in other sub-regions, as found in this review of ESA countries (Worku et al., 2020). The review highlights an intersecting mix of stressors relating to multidimensional forms of poverty, with psychosocial stresses and low self-esteem that may emerge from early childhood traumas or more recent challenges in the life course. As reported in *Section 3*, these may lead to vicious cycles and poor or harmful responses that further generate economic and social stresses. Such vicious cycles are even more likely when there is stigma and discrimination around youth mental health. The evidence shows that this may lead youth to hide mental disorders, so that they are only recognised when severe and acute.

COVID-19 is reported to have intensified these pressures in youth and mental disorders, particularly in relation to the impact of lockdown measures, disrupting peer contact, undermining employment and incomes or forcing youth into more stressful online education measures and living conditions – either intensively with families or alone at education institutions- adding to distress, particularly for those already anxious about the pandemic and about infecting family and peers. Here too the findings are consistent with findings from elsewhere in the continent (Langsi et al., 2021).

The findings suggest that youth have responded in different ways. For some, the coping strategies have further exacerbated challenges to mental wellbeing, such as when youth have resorted to use of harmful substances, to risky behaviours or to excessive time in online media. For others, however, the strategies have helped to overcome the negative consequences of the pandemic. Section 3 provides evidence of youth coming together to implement creative approaches for prevention efforts and adopt positive mechanisms. In the findings, these largely related to interventions to support psychosocial wellbeing, such as online peer interactions, web platforms to share experience and obtain advice, or measures to provide information to counter the anxiety generated by fake news. Liang et al. (2020) add further information on how China enabled work from home to manage the income loses and mental distress in working youth.

In terms of services and other sources of support, the lack of provision of and access to youth friendly mental health services is noted in the findings. This and inadequate training of service personnel in youth mental health issues acts as a further deterrent to service uptake. In some settings, such as for refugee Somali youth in Kenya, the findings note recognition of prior trauma and psycho-education and counselling services. However this is not widely formally available to youth facing more generalised poverty and other pressures. The most common forms of support are thus noted to come from family and friends, who may themselves not be well equipped to provide such support. For example, the findings point to meditation, art therapy and peer support in different ESA contexts, and to the role of caring adults. However, it is evident that there are shortfalls in formal systems, both in terms of statistics on the level of mental ill health in youth, and on their uptake of support from formal services and other forms social support. It is thus not clear on how effective the different forms of support from services and within society are, nor how effectively they cross-refer between them.

Social media and use of online sources appear to be playing an increasing role in youth mental health, including in providing forms of support. This too increased during the COVID-19 pandemic enabling some continuity of and access to services. In a systematic review Kauer et al. (2014) found this to be the case in other settings internationally, where young people sought ease of access, privacy, convenience, and the information in online services for mental health needs. As found in the review of ESA experience, COVID-19 has generated a range of social

media platforms to support youth mental health, and young people have played a role in support to wider communities. In India, for example, student volunteers in the Covid Aid Resources India Instagram group provide 24 hour support, including posting and updating accurate information and coordinating help to affected families and individuals (Singh, 2021). Young people have also set up initiatives to counter fake news related to COVID-19, as noted in the example of the group from Zimbabwe outlined in the findings. YouTube have ensured that all videos related to COVID-19 will not be used as a source of profit and will not be included in YouTube's built-in advertising service. Other social media applications such as snapchat have launched a mental health resource called 'Here for you' that guide on issues like anxiety, depression and anxiety (Singh, 2021).

Examples were provided in the findings of initiatives within the ESA region such CitesRISE in Nairobi that provide digital support for youth mental health. Such use of digital space for youth mental health services has been explored elsewhere in the world. For example, youth friendly platforms such as 'Go Ask Alice!' provide a question-and-answer website by Columbia University with a database of emotional health questions and 'Reach out' provides information and resources on mental health disorders. There is a growing number of mobile applications, advocacy toolkits and helplines that provide examples of practice that ESA youth and services can draw ideas and experience from (SAHM, 2021). However, as noted in the findings making such digital options equitable and accessible for the range of youth experiencing mental health issues calls for affordable airtime, data, internet and smartphones for young people and improved digital literacy. Section 3 notes that there are currently deficits in this in the ESA region, as is the case in other parts of Africa (Adeniran, 2019).

The findings point to a need for mental health and youth policies and guidelines to better recognise and address the drivers of youth mental health, including those relating to unemployment, insecure incomes, academic and social pressures and early or recent traumas. This is found in Section 3 to call for wider research evidence to inform measures, and integration of youth mental health in multiple sectors, including in education curricula, The findings also raise the concern that youth have a greater voice in designing, implementing and reviewing these policies and interventions. This is seen to be essential for appropriate economic and psychosocial interventions that reach the range of youth affected, and that respond to the specific needs of different groups of youth, whether to address economic, shelter, income issues of low income youth through to academic pressures, sleep deprivation and self-esteem issues in university students. With more online interventions providing a spectrum of support, from information to cognitive behavioural therapy and tele-counselling, it is evident that there is an opportunity and reality of change in how mental health interventions are designed and delivered, that has potential to reach many more young people with the support they need, and to break the stigma and isolation that has been found to undermine youth mental health and the efforts to support it.

5. Conclusion

Youth themselves play a major role in both understanding and responding to mental health issues, and the importance of peer support was highlighted in *Section 3*. This necessarily needs to address the range of youth situations and conditions in the region.

The biases in published literature are therefore a matter for concern. The fact that most published studies were conducted in South Africa, Kenya and Tanzania with no published studies found in 9 ESA countries raises concern around which youth are being reached. The focus on university and college students and the 24-29 year age group raises concern on how far other youth in precarious situations are being reached and their experience understood in knowledge and policy.

Emerging policies and measures on mental health need to better engage with the impacts of COVID-19 and youth specific interventions. The literature found inadequate evidence of interventions being scaled up. Most evidence came from small scale interventions, some highly

creative, and there is a gap in how these maybe assessed and taken to scale, including through the feedback from youth themselves. It is not always clear how many of these new interventions in the non-state sector interface and cross refer with frontline health and social services, and the competencies needed for this are often lacking. With many young people in the region in both rural and urban areas not accessing smart phones, laptops or data, there is a need to understand how online tools can be made available offline, or in simpler formats, while making digital access significantly more affordable for young people.

The COVID-19 pandemic has provided momentum for the recognition of mental health, and highlighted the weaknesses in addressing youth mental health. Meeting the deficit calls for collaborations across multiple sectors and stakeholders, that include a range of policy actors, schools, professionals, media, innovators, communities and families. Youth cannot be left behind in this, and the knowledge and measures moving forward need to be co-created with young people.

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Acronyms

AIDS Acquired immunodeficiency syndrome

COVID-19 Coronavirus 2019

ESA East and Southern Africa

HIV Human Immunodeficiency Virus
PTSD Post-Traumatic Stress Disorder
UNICEF United Nations Children's Fund
WHO World Health Organization

Appendix 1 Summary findings of papers specific to ESA countries

Thus table provides the summary of findings only from papers extracted for ESA countries.

Other African countries where data was extracted are not shown but available and included in the references.

Author	Title of article		Age gp	Country	Summary of findings and recommendations
Patterns a	and determinants of yo	uth	mental he	ealth in ea	st and southern Africa
Lauren M. Hill (2020)	Correlates of Anxiety and Depression among Young Men Living in Dar Es Salaam, Tanzania		15 years or older, mean age = 26 years	Tanzania	Twenty-two percent of men reported clinically significant symptoms of depression and 20% reported clinically significant symptoms of anxiety. Men living apart from family reported greater symptoms of anxiety and depression than men living with family, and employment was associated with a greater likelihood of clinically significant symptoms of both anxiety and depression. Childhood experience of violence was.strongly associated with both anxiety and depression. Social support was associated with lower levels of anxiety and depression, and with a lower likelihood of clinically significant levels of anxiety and depression
Lauren M. Hill (2017)	Anxiety and depression strongly associated with sexual risk behaviors among networks of young men in Dar es Salaam, Tanzania		Average age of 27 yrs.	Tanzania	Anxiety and depression are strongly associated with both inconsistent condom use and sexual concurrency in this population of young Tanzanian men.
Evodius Kuringe (2019)	Prevalence and correlates of depression and anxiety symptoms among out-of-school adolescent girls and young women in Tanzania: A cross-sectional study		15-23 years	Tanzania	Depressive and anxiety symptoms are prevalent among out-of-school Adolescent Girls and young women (AGYW) in Tanzania.model; age, educational status, marital status, family composition, emotional support, HIV status, having experienced violence from a sexual partner and engaged in sex work in the last six months were significantly associated with reporting symptoms of anxiety and depression. They affected over a third of the study population. The findings emphasize the need to strengthen preventive interventions and scale-up mental health disorder screening, referral for diagnosis and management. Continued advocacy on mental health may help create awareness on primary preventive interventions including the creation of policies and implementation plans for mental health among AGYW; Scaling-up of mental health services including screening, diagnosis, and management among AGYW
Carmen H. Logie (2020)	Contextual factors associated with depression among urban refugee and displaced youth in Kampala, Uganda: findings from a cross-sectional study		16–24	Uganda	Contextual factors, including food insecurity and violence, increase depression risk among urban refugee and displaced youth. Universal challenges associated with displacement to urban contexts may include living in slums and their associated stressors. Attending to contextual factors through reducing food insecurity and SGBV, and building social support networks, has the potential to advance mental wellbeing among urban refugee and displaced adolescents and youth.
Innocent B. Mboya (2020)	Factors associated with mental distress among undergraduate students in northern Tanzania		20-30 (mean age 24)	Tanzania	Awareness creation, counselling to help those with mental health issues, establishment of student drop-in centers for such services and promotion of social and recreational activities at the college.
Judy Wanjiru Mbuthia (2018)	Attributions and private theories of mental illness among young adults seeking psychiatric treatment in Nairobi: an interpretive phenomenological analysis		18–25	Nairobi, Kenya	Those who attributed their distress to an internal locus of control had a positive outlook towards therapy and behavior change. External factors were mainly ascribed to be the cause of negative emotions and thoughts leading to psychological illness. Stigma and self-stigma particularly were challenging attributions that needed socio-cultural awareness and youth empowerment work. certain aspects of our participants' lives emanated from uncontrollable events that shaped their locus of control to be externalized. They expressed the need for more intense and supportive therapy. Mental health care of young adults could benefit from exploration of their personal beliefs and attributions about their illness and cure in order to provide the best-adapted treatment for them and consequently make the mental health care more attuned to their concerns and needs.
Mark Otiende	Psychometric evaluation of the Major Depression		13-24 years old	Kenya	3.6% [95%Cl 2.7, 4.7] of our youth presented with DSM-IV major depressive symptoms. Female and older adolescents had higher

Author	Title of article	Age gp	Country	Summary of findings and recommendations
(2017)	Inventory among young people living in Coastal Kenya			prevalence of DSM-IV major depressive symptoms. highest prevalence of depressive symptoms was observed among females aged 20–24. MDI has good psychometric properties. Given its brevity, relative ease of usage and ability to identify at-risk youth, it may be useful for epidemiological studies of depression in Africa
Brian J Hall (2019)	Perspectives of adolescent and young adults on poverty-related stressors: a qualitative study in Ghana, Malawi and Tanzania	Adole- scents (15 to 18), and young adults (18 and 24)	Ghana, Malawi and Tanzania	(1) stressors related to poverty and the lack of basic necessities due to limitations in income generation, poor community infrastructure and facilities, (lack of food, school-related expenses), (2) additional stressors that worsen poverty-related stress- (environmental stressors; security, safety and violence; weak social capital; unintended pregnancy and death of parent or guardian. Negative coping also hinders stress reduction), (3) impacts of these stressors on functioning, health and well-being and education and (4) coping strategies used by community members – (Negative: such as risk-taking eg. Stealing/theft or relating poorly with others, abandon their family; Positive: 1-problem-focused coping, including working hard, starting a business or changing jobs. 2- social coping by providing help and advice to others, seeking help or opening up to others, improving relationships and paying off debts, 3- spiritual coping by turning to God, 4- preventive coping by avoiding problematic people being cautious in public places, driving safely and avoiding risky behaviours., 5- emotion-focused coping, by being positive, being persistent, and tolerating their situation. Cash transfer and other poverty alleviation programmes could reduce mental health and physical health problems, particularly as they relate to those stressors that have direct relationships with poverty but are unlikely to address structural factors related to poverty, such as lack of access to schools and quality health facilities.
Florence Jaguga (2018)	Post-Traumatic Stress Disorder, Major Depressive Disorder and Generalised Anxiety Disorder, Among University Students Following A Terrorist Attack in Kenya	University students	Kenya	High mental health impact upon survivors of the Garissa University College attack. High positivity rate for major depressive disorder, post-traumatic stress disorder and generalised anxiety disorder
Lugata (2020)	Symptoms and predictors of depression among university students in the Kilimanjaro region of Tanzania: a crosssectional study	Mean: 24 years old	Tanzania	Depression among university students is greatly linked to examinations and financial issues. Good relationships offer protection for getting depressive symptoms. Those who used substances or had other illnesses had a greater risk of getting depression. Eating disorders were a major risk factor for depression. These findings recommend more efforts towards awareness about factors which add and takeaway from depressive symptoms. Further, it is recommended that more support can decrease the risks of self-harm, drop outs and poor academic performance among university students.
Jason Bantjes (2019)	Prevalence and Sociodemographic correlates of common mental disorders among first-year university students in post-apartheid South Africa: implications for a public mental health approach to student wellness	18-21 years	South Africa	38.5% of respondents reported at least one lifetime CMD, the most common being major depressive disorder (24.7%). Twelve-month prevalence of any CMD was 31.5%, with generalised anxiety disorder being the most common (20.8%). The median age of onset for any disorder was 15 years. The median proportional annual persistence of any disorder was 80.0%. Female students, students who reported an atypical sexual orientation, and students with disabilities were at significantly higher risk of any lifetime or 12-month disorder. Female gender, atypical sexual orientation, and disability were associated with elevated risk of internalising disorders, whereas male gender, identifying as White, and reporting an atypical sexual orientation were associated with elevated risk of bipolar spectrum disorder highlight the marked rates of psychopathology among first-year university students in SA. These data support the growing body of evidence that more attention needs to be paid to supporting the psychological wellbeing of young adults as they transition into tertiary education and highlight the need for a public mental health approach to promoting student wellness.
Adeyinka A. Alabi	Prevalence and factors associated with suicidal	16-24	South Africa	Given the increasing trend of suicide and suicide attempts amongst students at HEIs of learning globally and in South Africa, this study

Author	Title of article	Α	lge gp	Country	Summary of findings and recommendations
(2020)	ideation amongst college students in the Nelson Mandela Bay Municipality, South Africa.			Southern Africa	sought to assess the rate of suicidal ideation, plans and influencing factors of suicidal ideation disaggregated by gender of students at an HEI in NMBM in South Africa. This study found a high prevalence of suicidal ideation (24.5%) amongst the students of this school.
Carole L. Bandy (2020)	Reduction of PTSD in South African University Students Using Transcendental Meditation Practice	Of	Mean age f early 0s	South Africa	Results were significantly associated with regularity of practice. The study replicates recent findings and offers an alternative educational treatment for higher education. Regular practice of the TM technique among experimental students was associated with significant and lasting reduction of post-traumatic stress disorder symptoms and depression, with large effect sizes, and with the effect evident within 15 days. As predicted, regularity of meditation practice was directly related to the strength of the effect in the first 15 days, leading to a clearer inference that it was the TM practice per se that was responsible for the relief of post-traumatic stress disorder symptoms.
Jason Bantjes (2020)	Inequality and mental healthcare utilisation among first-year university students in South Africa	(s ui	8-21 students nder 21 ears of ge)	South Africa	A total of 18.1% of students utilised mental healthcare in the past 12 months, with only 28.9% of students with mental disorders receiving treatment (ranging from 28.1% for ADHD to 64.3% for bipolar spectrum disorder). Of those receiving treatment, 52.0% used psychotropic medication, 47.3% received psychotherapy, and 5.4% consulted a traditional healer. It is striking that among our sample of first-year students from two well-resourced universities in SA, only 28.9% of students with common mental disorders utilised mental healthcare services in the preceding 12 months, in spite of having access to free student counselling services on campus. It is noteworthy that among students who sought treatment for a mental health problem, the majority made use of pharmaceutical interventions (52.0%) and a slightly lower proportion utilised psychological interventions (47.3%). These findings suggest that black, male and first-generation students with atypical sexual orientations, face particular barriers to accessing mental healthcare, and require targeted interventions to improve their utilisation of mental health treatments.
Cowden (2017)	Mental Toughness in South African Youth: Relationships With Forgiveness and Attitudes Towards Risk		4-35 ears	South Africa	Research is important on mental toughness so that risky behaviour can be reduced. The results in this study showed that mental toughness was a significant factor towards mental illness risk. Individuals with higher mental toughness are shown to be more likely to forgive others and have a higher level of taking physical risks however are more prone to behaviours known to be mentally risky.
DeWitt (2019)	The impact of a psychiatry clinical rotation on the attitude of South African final year medical students towards mental illness	st (2	Medical tudents 22-38 ears).	South Africa	Studies have shown that undergraduate training is vital for altering attitudes of medical students towards mental illness as well as to bring in some intervention strategies such as being in a clinical psychiatric rotation. Participants showed a major improvement in their attitude toward mental illness post the rotation. However, the students overall perception toward psychiatry stayed negative. Female medical studies showed a enhanced positive perception towards mental illness. There is a value in clinical rotations and other strategies which reduce the stigmatising attitudes among the trainees.
Eloff (2020)	Measuring mental health and well-being of South African undergraduate students	gı	Inder- rad tudents	South Africa	Both follow up groups within this study displayed lower social-psychological prosperity as well as reduced mental health and well-being compared to the baseline groups. It is clear that the lowering in mental health and well-being of undergraduate studies is serious. It is suggested that conversations about student well-being must include their own role in increasing their well-being to broaden the support made to students. This study recommends that individual agency for well-being should on at the same level as organisational support for student well-being.
Gibbs (2018)	An exploratory analysis of factors associated with depression in a vulnerable group of young people living in informal settlements in South Africa	pı (a	oung eople ages 15- 4)	South Africa	There is evidence to show that i is linked to depression among youth populations. Examples of these are food insecurity, education, social class and financial burden which exhibit a positive link to depression compared to income, earnings and consumption indicated a mixed link to depressive symptoms. More specifically, there are also sites of high rates of poverty, violence and HIV vulnerabilities all linked to poor mental health outcomes. It is also suggested that urban informal settlements have higher rates of depression than other settlements

Author	Title of article	Age gp	Country	Summary of findings and recommendations
				forms possibly related to social disorganization and not much community linkage.
Hadebe (2020)	Resilience and social support of young adults living with mental illness in the city of Tshwane, Gauteng province, South Africa	Young adults (18-24 years)	Tshwane Gauteng province South Africa	Those young adults living with mental illness who had support from family and friends were able to withstand the mental challenges and had a better view on the future. But those who portrayed their relationship with family and friends as unsupportive showed a lower self-esteem and had issues when coping with stress and hard situations. Social support is about building good relationships with others and looking for support when necessary. Other research has shown that threats to social connectedness like loneliness and reject show a similar biochemical response that is linked to mental illness. Resilient participants showed compassion, tolerance and understanding as well as empathy felt from their family and friends. Mental healthcare nurses must be inclusive of families from mental healthcare users when they are seeking psychotherapy to enhance awareness and create support from others and enhance resilience. It is recommended that community focused mental health programmes should provide help to mental healthcare users in order to blend into their communities sufficiently and improve resilience as a coping mechanism.
Hatcher (2019)	Effect of Childhood Poverty and Trauma on Adult Depressive Symptoms Among Young Men in Peri- Urban South African Settlements	Youth (18-30)	South Africa	Men in this sample showed higher rates of childhood trauma than found in the other literature. Physical abuse in childhood was reported to be nearly 2/3s of the study sample, which is higher than past South African studies. 65.5% of this sample showed signs of childhood and psychological trauma compared with %% of men in other studies. The conditions of the informal settlement may also add to mental illness due to fast alterations in social structures or pressure due to economic issues. This data shows that mental health and poverty need to be researched as linking issues and indicate that poverty is a social determinant of mental health. Addressing poverty and childhood protection within peri-urban settlements in Southern Africa could have shown an effect on health and wellbeing of young men and the future South African youth.
Manyema (2018)	The associations between interpersonal violence and psychological distress among rural and urban young women in South Africa	Youth (18-23 years)	South Africa	Rural adolescents experiencing high levels of household stress were more like to have psychological distress than those going through lowered stress levels. There is also a direct association between interpersonal violence and mental illness in rural South African women which becomes statistically insignificant. Another side is that there may be high levels of household stress which takes away the part of social connectedness therefore making the young women more susceptible to mental illness. Culture defines and create certain types of mental illness and impacts how symptoms are perceived. Interventions for violence and mental health in the urban areas may therefore not necessarily translate into the same gains and rural areas. Youth is a vital period for health interventions to keep their benefits from early childhood and create better mental health for adult years. More research is needed to explore the other factors like alcohol abuse and childhood experiences of violence.
Myers 2021	Maltreatment during childhood and risk for common mental disorders among first year university students in South Africa	University students	South Africa	48.4% of students reporting some type of maltreatment during childhood and 41% reporting that this maltreatment during childhood and 41% reporting that this maltreatment included emotional and physical and or sexual abuse. It can be explained that emotional abuse also leads to emotional issues and the showings of negative self-esteem. There is a need to identify students who benefit from psychological interventions which show strategies for reducing harms linked to childhood maltreatment. Group therapy can be an option however this is not feasible in an age of COVID-19 where physical distancing is needed unless groups are online. There is strong evidence to show the effectiveness of self-guided internet type of CBT which is perceived as an evidence based type of treatment for addressing traumatic stress and other mental health issues.
Pillay (2020)	Depressive symptoms in first year students at a rural	First year students	South Africa	Rural students have less adjustment issues as compared to attending urban students when attending urban based universities. Loneliness and withdrawal from social interaction run opposite to academic development and expectations of university students and show issues

Author	Title of article		Age gp	Country	Summary of findings and recommendations
	South African University				with mental health. Low mood, negative cognitions and low self-esteem were reported by over 20% of the participants. The presence of these symptoms negatively affected their academic work and show difficult functioning in good study habits. There is a concerted effort needed to increase the mental health services on university campuses as well as more mental health awareness and destigmatizing campaigns. There is also a need for NGO, healthcare facilities and national health departments to be developed in order to enhance the options available to students with mental health issues.
Chigerwe (2020)	Exploring issues surrounding mental health and wellbeing across two continents: A preliminary cross-sectional collaborative study between the University of California, Davis, and University of Pretoria		Students under 30 years	South Africa and United States	Results show that students from university of Pretoria had comparable levels of anxiety, burnout depression and quality of life. Female students at UP were likely to have higher scores of emotional exhaustion showing higher levels of stress consistent with previous studies. There were mild to moderate levels of depression shown in this study. The assessment of quality of life depict an identification with the side sod well-being and therefore there a need to create interventions through provision of resources to students. Certain strategies for improving mental health and wellness include curricular changes providing on-site items for students mental health. This could be through increasing mental health awareness among the students and faculty. Further, an inclusion of mindfulness based stress reduction intervention programs in the curriculum.
Somefun (2020)	The effect of family and neighbourhood social capital on youth mental health in South Africa		15-24 ages	South Africa	Findings show that 26% of the youth in this study have mental illness. Family levels of income decreased the odds of depression. A high view on crime in their areas was associated with significantly higher odds of depression. The descriptive results show a slight gender differential among youth from depression where the rates of depression are higher among women than men. Also, hormonal changes in women are precursors for depression.
Mall (2018)	The relationship between childhood adversity, recent stressors, and depression in college students attending a South African university		First year Uni Students	South Africa	College students have an increased risk of depression. Results show that there is a significant association between earlier adversity, certain stressors and depression among students. It is recommended that research should address the impact of childhood trauma and recent stressors on wellbeing, quality of life, choices post-graduation and academic performance. There should be interventions that are readily available to university students in the form of psych-social support and increasing coping strategies.
Walt (2020)	The burden of depression and anxiety among medical students in South Africa: A cross-sectional survey at the University of Cape Town		18 up medical students	South Africa	Reported rates diagnosed by. A health professional were 25% for depression and 20.5% for anxiety among the medical students. Female sex was associated with both depression and anxiety. Student protests affected the mental health of these students. There should be multiple efforts aimed at initiatives which strengthen mental health and culture based on mental health. These efforts help build resilience in the next generation of health professionals and help the health education system.
Moses K. Nyongesa (2021)	Prevalence, risk and protective indicators of common mental disorders among young people living with HIV compared to their uninfected peers from the Kenyan coast: a cross-sectional study		18–24 years	Kenya	CMDs are more prevalent among YLWH compared to their uninfected peers. Being HIV positive as a young person in this setting is predictive of more depressive symptoms and its comorbidity with anxiety symptoms. Routine screening of these CMDs should be integrated in the care package provided to them at their point of care. Community level, programmes strengthening the social capital or improving the overall quality of life of young adults with or without HIV may be beneficial to their mental health.
The impac	t of the COVID-19 pand	den	nic and its	response	s on youth mental health
Joseph K. B. Matovu (2021)	COVID-19 Awareness, Adoption of COVID-19 Preventive Measures, and Effects of COVID-19 Lockdown Among Adolescent Boys and Young Men in Kampala, Uganda		10-24 (75% btw 15-24yrs)	Uganda	COVID-19 lockdown had devastating mental, socioeconomic and healthy effects. COVID-19 lockdown led to increased mental health challenges; inability to access basic needs and access to essential health services; and led to income and job losses due to the closure of businesses during the lockdown. Respondents reported increased engagement in unhealthy behaviours including sedentary life styles characterized by excessive watching of TV and binge eating. Need for continuous health education and health promotion to improve uptake of COVID-19 prevention measures and socio-economic

Author	Title of article		Age gp	Country	Summary of findings and recommendations
					support provided to ABYM to help them to cope with the effects of COVID-19 lockdown
Anita Padmanab hanunni (2021)	The Loneliness–Life Satisfaction Relationship: The Parallel and Serial Mediating Role of Hopelessness, Depression and Ego-Resilience among Young Adults in South Africa during COVID-19		mean age of 22 years	South Africa	Exploratory study provided insights into potential pathways among indices of positive and negative psychological well-being, as well as the role of a protective factor such as ego-resilience: loneliness is associated with hopelessness, which in turn is associated with depression, and that ego-resilience mediates the association between all the negative indices of psychological well-being and life satisfaction. The types of loneliness, depression and hopelessness as well as lowered life satisfaction were show to be statistically significant in comparison to other samples from the same population. The levels of life satisfaction were known to be significantly lower than those reported in other contexts when the COVID-19 pandemic has been happening. High amounts of loneliness were associated with high levels of hopelessness which then led to high amounts of depression and lowered life satisfaction. Ego-resilence was found to mediate the role of loneliness depression and hopelessness and lowering satisfactory life perceptions.
Gibson Mudiriza (2020)	Youth emotional well-being during the COVID-19- related lockdown in South Africa		18-35 years	South Africa	Low levels of emotional well-being during the COVID-19 related lockdown, with no less than 72% of young participants revealed to be having depressive symptoms. prevalence was higher among youths who were older (76%) and female (76%), and had higher education (78%). increasing age, being female, having higher levels of education and residing in urban informal areas were significantly associated with increasing depressive symptoms. In contrast, being employed and providing family care were significantly associated with decreasing depressive symptoms. Of these factors, age and education exerted greater association with depression. age had a greater association with depressive symptoms for male participants, while education had a greater association for female participants Policymakers need to also pay close attention to mental health problems experienced by young people in the country, as those with depressive symptoms might see their chances to reconnection to education or employment hampered by the effects of mental ill-health, once lockdown is released.
Asante (2020)	COVID-19 school closure and adolescent mental health in SSA		Adole- scence	SSA	Certain factors have exacerbated adolescence mental health issues during COVID-19, these include having to stay at home when teenagers are used to socialising often. The lockdown restrictions therefore undoubtedly affected the mental health of adolescence across sub-Saharan Africa. It was recommended that ensuring the mental well-being of adolescents is important to address right now given the changes of their lives from the COVID-19 pandemic.
Support ar	nd services for youth r	nei	ntal health	and gaps	
Stanley Kutcher (2019)	Creating Evidence-Based Youth Mental Health Policy in Sub Saharan Africa: A Description of the Integrated Approach to Addressing the Issue of Youth Depression in Malawi and Tanzania			Tanzania and Malawi	Mental Health Literacy as a Foundation for Enhancing Mental Health Outcomes (Radio Drama for Community- and Curriculum-Based Approaches for Schools)
Kennedy Amone- P'Olak (2017)	Cognitive emotion regulation strategies and mental health problems in war-affected youth in Northern Uganda: findings from the WAYS study		18 - 25	Uganda	The interaction terms of War Experiences (WE) and coping strategies of rumination, catastrophizing, and self-blame significantly predicted symptoms of depression/anxiety while only the interaction between WE and blaming others predicted conduct problems. In contrast, putting into perspective and planning negatively predicted symptoms of depression/anxiety. Interventions to reduce mental health problems should target coping strategies, especially adaptive strategies to youth in many post conflict settings in Africa.
Denford Gudyanga (2021)	Z Factor: Drama as a tool to tackle mental health stigma: study design and protocol for community and public		Adole- scent or young adult	Zimbabwe	Study protocol on use of drama competitions to engage young adults and their support networks across a variety of socioeconomic groups. Dramas were to act as discussion starters, paving the way toward broader and deeper psychosis treatment discussions among rural communities and gaining insight. Outcomes of the pilot community

Author	Title of article	Age gp	Country	Summary of findings and recommendations
	engagement in rural Zimbabwe			engagement project will be instrumental in improving understanding community perceptions about psychosis treatment and recovery in rural Zimbabwe and increasing community awareness about psychosis, as well as paving the way for initiating service provider collaboration to promote early detection and encouraging early health-seeking behaviours. The above outcomes will also inform the design of models for more responsive community and public engagement initiatives in similar low resource settings in Zimbabwe and beyond
Carol Hermann (2021)	Bonsai as a group art therapy intervention among traumatized youth in KwaZulu-Natal	18 - 25	South Africa	Participants experienced an improvement in their mental state, which was attributed by them to the practice of the art of bonsai. Bonsai can be beneficial as a healing medium mental health tool when employed as art therapy and can be promoted in a group setting in potential rehabilitation situations
Kim Harrisberg , Lungelo Ndhlovu	Armed with social media, Zimbabwean youth fight coronavirus 'infodemic'		Zimbabwe	Zimbabwean youth working with development charity Voluntary Service Overseas (VSO) have taken to Twitter, WhatsApp, Facebook and radio to comb through online comments, identify and correct COVID-19 misinformation. https://www.reuters.com/article/us-health-coronavirus-zimbabwe-socialmed-idUSKCN24O0FD

Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. In southern Africa, these typically relate to disparities across racial groups, rural/urban status, socio-economic status, gender, age and geographical region. EQUINET is primarily concerned with equity motivated interventions that seek to allocate resources preferentially to those with the worst health status (vertical equity). EQUINET seeks to understand and influence the redistribution of social and economic resources for equity-oriented interventions. EQUINET also seeks to understand and inform the power and ability people (and social groups) have to make choices over health inputs and their capacity to use these choices towards health.

EQUINET implements work in a number of areas identified as central to health equity in east and southern Africa

- Protecting health in economic and trade policy
- Building universal, primary health care oriented health systems
- Equitable, health systems strengthening responses to HIV and AIDS
- Fair Financing of health systems
- Valuing and retaining health workers
- Organising participatory, people centred health systems
- · Promoting public health law and health rights
- Social empowerment and action for health
- Monitoring progress through country and regional equity watches

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CEHURD Uganda; University of Limpopo, South Africa; SEATINI, Zimbabwe; REACH Trust Malawi; Ministry of Health Mozambique; Ifakara Health Institute, Tanzania; Kenya Health Equity Network; Malawi Health Equity Network, SATUCC and NEAPACOH

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