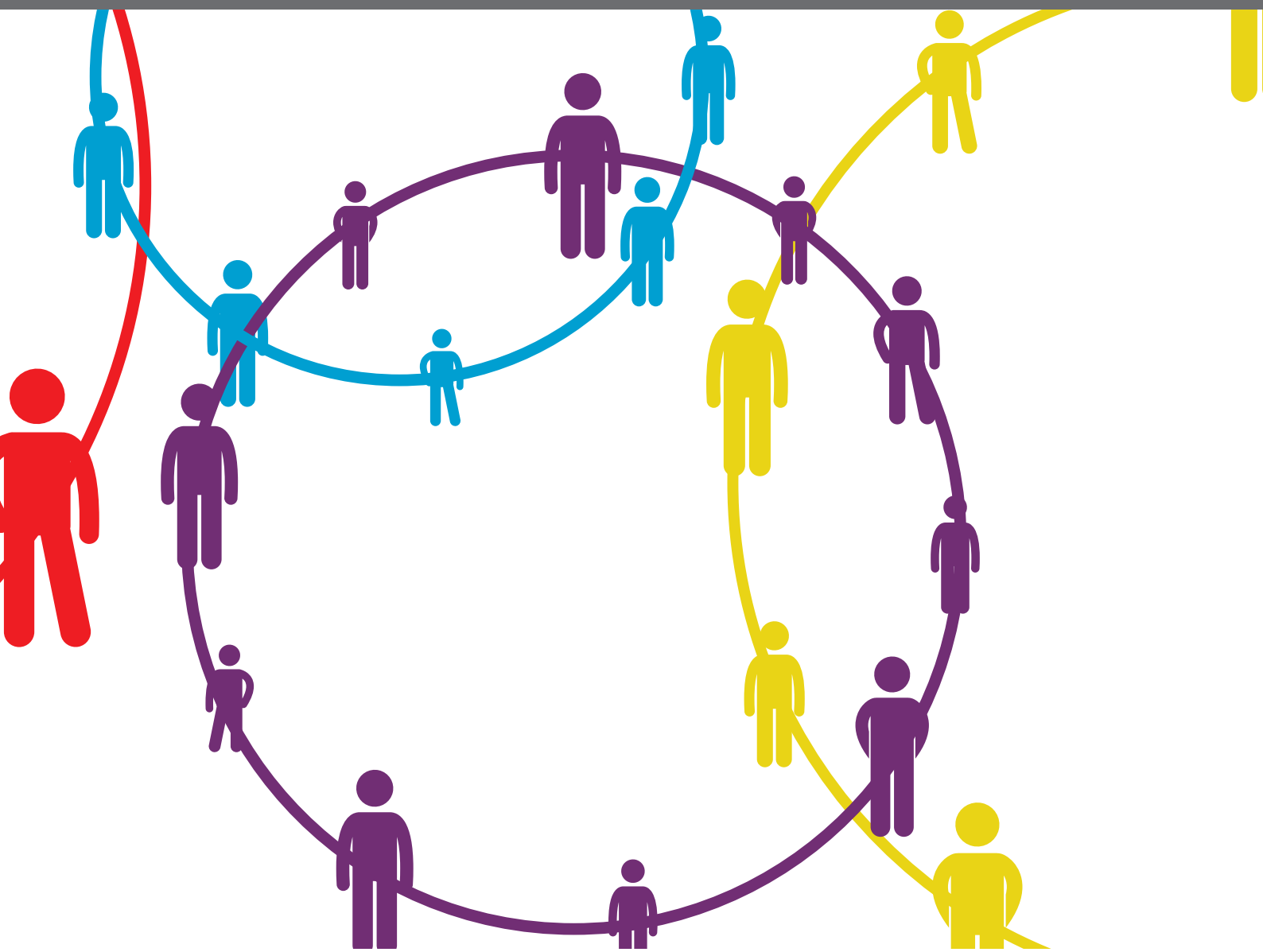
MENTAL HEALTH AND WELL-BEING AMONG AFRICAN CHILDREN: IMPLICATIONS OF WESTERN APPROACHES TO COUNSELING AND TREATMENT

EDITED BY: Lynne Sanford Koester and Waganesh A. Zeleke
PUBLISHED IN: Frontiers in Sociology, Frontiers in Psychiatry and Frontiers in Public Health



frontiers Research Topics

frontiers

ISSN 1664-8714
ISBN 978-2-88971-250-2
DOI 10.3389/978-2-88971-250-2

About Frontiers

Frontiers is more than just an open-access publisher of scholarly articles: it is a pioneering approach to the world of academia, radically improving the way scholarly research is managed. The grand vision of Frontiers is a world where all people have an equal opportunity to seek, share and generate knowledge. Frontiers provides immediate and permanent online open access to all its publications, but this alone is not enough to realize our grand goals.

Frontiers Journal Series

The Frontiers Journal Series is a multi-tier and interdisciplinary set of open-access, online journals, promising a paradigm shift from the current review, selection and dissemination processes in academic publishing. All Frontiers journals are driven by researchers for researchers; therefore, they constitute a service to the scholarly community. At the same time, the Frontiers Journal Series operates on a revolutionary invention, the tiered publishing system, initially addressing specific communities of scholars, and gradually climbing up to broader public understanding, thus serving the interests of the lay society, too.

Dedication to Quality

Each Frontiers article is a landmark of the highest quality, thanks to genuinely collaborative interactions between authors and review editors, who include some of the world's best academicians. Research must be certified by peers before entering a stream of knowledge that may eventually reach the public - and shape society; therefore, Frontiers only applies the most rigorous and unbiased reviews.
Frontiers revolutionizes research publishing by freely delivering the most outstanding research, evaluated with no bias from both the academic and social point of view. By applying the most advanced information technologies, Frontiers is catapulting scholarly publishing into a new generation.

What are Frontiers Research Topics?

Frontiers Research Topics are very popular trademarks of the Frontiers Journals Series: they are collections of at least ten articles, all centered on a particular subject. With their unique mix of varied contributions from Original Research to Review Articles, Frontiers Research Topics unify the most influential researchers, the latest key findings and historical advances in a hot research area! Find out more on how to host your own Frontiers Research Topic or contribute to one as an author by contacting the Frontiers Editorial Office: frontiersin.org/about/contact

MENTAL HEALTH AND WELL-BEING AMONG AFRICAN CHILDREN: IMPLICATIONS OF WESTERN APPROACHES TO COUNSELING AND TREATMENT

Topic Editors:
Lynne Sanford Koester, University of Montana, United States
Waganesh A. Zeleke, Duquesne University, United States

Citation: Koester, L. S., Zeleke, W. A., eds. (2021). Mental Health and Well-Being among African Children: Implications of Western Approaches to Counseling and Treatment. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-88971-250-2

Table of Contents

frontiers in Sociology

EDITORIAL
published: 09 July 2021
doi: 10.3389/fsoc.2021.727587

Editorial: Mental Health and Well-Being Among African Children: Implications of Western Approaches to Counseling and Treatment

Lynne Sanford Koester[1]* *and Waganesh A. Zeleke*[2]

[1]Department of Psychology, University of Montana, Missoula, MT, United States, [2]Department of Counseling, Psychology and Special Education, Duquesne University, Pittsburgh, PA, United States

Keywords: African childhood, mental health, counseling African children, autism, adverse experiences, epilepsy, counselor training

Editorial on the Research Topic

Editorial: Mental Health and Well-Being Among African Children: Implications of Western Approaches to Counseling and Treatment

For this Research Topic, we invited scholars to submit manuscripts to expand our understanding of the mental health needs and provision of care for children in Africa. The purpose was to enhance our knowledge of the culturally unique experiences of children growing up in African nations, and of the importance of adapting psycho-therapeutic interventions in ways that respect and build upon their inherent strengths.

Africa contains immensely diverse cultures, languages, religions, and resources. The distribution of wealth is highly uneven, resulting in many areas of poverty and others of abundance. From one country to the next, this disparity affects educational opportunities and access to nutritional, sanitation, and health supports necessary for optimal development. In nations struggling to provide the very basics for their citizens, children needing more specialized assistance may be neglected or considered lower priority. Mental health concerns are often addressed primarily through spiritual practices and beliefs. Articles presented here pertain primarily to Ethiopia, Uganda, and Western Africa, but address issues applicable to many other regions of the continent. The mental health needs represented include epilepsy, autism spectrum disorders, trauma and adverse experiences; some focus on counseling techniques and awareness, while others emphasize training or culturally-responsive practices.

Despite great advances in medical care in the developing world, it is still often the case that mental health is not included in these services. The emphasis continues to be on physical health rather than a more holistic approach; funding for research and for training mental health workers reflects this reality in many parts of Africa.

As Sarkar et al. assert, integrating psychological care into the public health system is a global priority inherent in the Sustainable Development Goals. In writing about children with epilepsy in Uganda, these authors explore the perspectives of caregivers in an outpatient mental health clinic, noting that within households there may be differences in the kind of care sought for family members (traditional help, no care at all, or biomedical care). Differences may be related to perceptions of the cause of illness, such as bewitchment or retribution for parental transgressions, in which cases traditional healing is most likely the first form of care sought. Children who show improvements with psychotropic medication are often able to continue this

OPEN ACCESS

Edited and reviewed by:
Wulf Rössler,
Charité – Universitätsmedizin Berlin, Germany

Correspondence:
Lynne Sanford Koester
lyskoester@gmail.com

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Sociology

Received: *18 June 2021*
Accepted: *23 June 2021*
Published: *09 July 2021*

Citation:
Koester LS and Zeleke WA (2021) Editorial: Mental Health and Well-Being Among African Children: Implications of Western Approaches to Counseling and Treatment. Front. Sociol. 6:727587. doi: 10.3389/fsoc.2021.727587

approach, but shortages of free medication may lead to a return to alternative and more traditional therapies.

Clay et al. review the literature regarding interventions with West African children who have endured adverse childhood experiences, finding little evidence that these therapies were designed specifically to meet *children's* developmental needs. These authors identify four relevant themes: Western, Spiritual, Expressive Arts, and Cultural Approaches. They note that West African children may be exposed to adverse experiences such as terrorism, abuse, and violence due to political conflict, all of which contribute to an increasingly urgent need for mental health interventions. Nevertheless, there is a dearth of information about program availability and efficacy.

Westernized mental health diagnostic processes and evidence-based treatments are limited in many developing countries, as reported by Hughes et al. In Ethiopia, for example, there is often a lack of health care services in general, and therefore an inadequate foundation on which to build mental health practices. Despite a documented need, there are few professional development programs for training mental health workers. Many non-Western cultures adhere to traditional religious views to interpret mental illness; symptoms may be attributed to supernatural causes or spiritual crises, rather than to biopsychosocial influences. As a result, individuals seeking mental health counseling in Ethiopia and many African countries may be limited to family, friends or local healers. Even if families desire to seek Westernized services for their child, there may be barriers such as socioeconomic and cultural factors, negative attitudes (stigma) toward mental illness, or fear of new and unfamiliar practices. Cultural beliefs, traditions, and taboos are passed down through generations. If we are to achieve the goal of improving mental health care access for Africa's children, a full appreciation of the context and larger cultural considerations is essential.

Wondie and Tadele continue this theme by exploring the extent to which the education system in one Ethiopian town is responsive to the psychosocial and mental health needs of primary school children. In general, teachers' awareness of their students' mental health needs tends to be low, and few psychosocial or mental health resources are available. The schools typically do not offer sufficient mental health training to teachers to help them identify problems and make referrals. These authors report that the Ethiopian education system in general is not sufficiently responsive to the psychosocial and mental health needs of primary school students. As in other African nations, there is a critical need for investing in childhood mental health services and appropriate training of relevant professionals.

Zeleke et al. examine the effect of professional development training on educators' and practitioners' knowledge of autism spectrum disorders. Helping professionals participated in culturally-responsive and evidence-based training, showing significant improvement in knowledge about the symptoms, nature, and characteristics of ASDs and appropriate interventions. The authors conclude with recommendations for addressing cultural factors impacting the diagnosis and treatment of childhood ASDs in Africa.

According to Meshesha and Johnson, Ethiopia's Federal Ministry of Health is considering implementing a national mental health strategy guided by the World Health Organization's pyramid model. This would be a remarkable move toward adopting contemporary approaches to mental health services, but in reality Ethiopia and many African countries struggle with a limited number of well-trained mental health professionals. The authors identify challenges Ethiopia might face in implementing this model, and suggest ways of addressing the critical need for more trained mental health professionals to provide culturally-responsive approaches with children and adolescents.

These articles expand our understanding of mental health issues relevant to African children today, such as the need for better training of personnel working with these children, unique strengths in African families that might lead to more effective interventions, and the importance of building upon these in therapeutic settings.

AUTHOR CONTRIBUTIONS

LK and WZ collaborated by soliciting authors, reviewing initial abstracts for suitability, and assigning each submission to reviewers. Together we monitored the overall progress and revisions of manuscripts until all were deemed fully acceptable for this Research Topic.

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Sociology

MINI REVIEW
published: 17 December 2020
doi: 10.3389/fsoc.2020.583931

Developing a Framework to Increase Access to Mental Health Services for Children With Special Needs in Ethiopia

Tammy L. Hughes, Cydney Quinn, Amy Tiberi and Waganesh A. Zeleke*

Department of Counseling, Psychology and Special Education, Duquesne University, Pittsburgh, PA, United States

OPEN ACCESS

Edited by:
Wulf Rössler, Charité–Universitätsmedizin Berlin, Germany

Reviewed by:
Markos Tesfaye, St. Paul's Hospital Millennium Medical College, Ethiopia
Tirussew Teferra Kidanemariam, Addis Ababa University, Ethiopia

****Correspondence:***
Tammy L. Hughes
hughest@duq.edu

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Sociology

Received: *15 July 2020*
Accepted: *06 November 2020*
Published: *17 December 2020*

Citation:
Hughes TL, Quinn C, Tiberi A and Zeleke WA (2020) Developing a Framework to Increase Access to Mental Health Services for Children With Special Needs in Ethiopia. Front. Sociol. 5:583931. doi: 10.3389/fsoc.2020.583931

The availability and accessibility of Westernized mental health diagnostic processes and evidence-based treatments are limited in developing countries, such as Ethiopia (Kakuma et al., 2011; Hohenshil et al., 2013; Wondie, 2014; Zeleke et al., 2017b). Similar to other developing nations, there is (a) a lack of health care services for mental practices to build on, (b) limited services that are well-suited to the culture (Wondie, 2014; Zeleke et al., 2019), (c) limited scientific literature useful for documenting the needs of the Ethiopian public, and (d) too few mental health professional preparation programs (Zeleke et al., 2019). Whereas Western cultures generally follow the biomedical model conceptualization and treatment of disease, non-Western cultures, such as Ethiopia tend to adhere to traditional and religious views to explain the origin of mental illness (Kortmann, 1987; Jacobsson and Merdassa, 1991). Mental health symptoms may be attributed to supernatural causes or other spiritual crises, rather than a combination of biopsychosocial influences. As such, individuals seeking help with mental health symptoms in Ethiopia are mostly limited to family, friends and local community healers (Zeleke et al., 2017a, 2019). When individuals are brought to the few places providing Westernized mental health care, it is often only after exhausting other traditional and religious alternatives (Bekele et al., 2000). Even when there is a desire to seek Westernized services, socioeconomic circumstance, cultural factors (e.g., a focus on collectivism practices), negative attitudes toward mental illness, along with unfamiliarity and fear of these new practices, are noted barriers to receiving treatments. Beliefs passed down through cultural taboos go on to effect multiple generations. Not only do barriers affect individuals, but they also negatively impact the range of services for children, families and communities. With the ultimate goal of improving mental health care access for children, a full appreciation of the context is essential.

Keywords: healthcare, well-being, mental health, Ethiopia, children

ETHIOPIAN CONTEXT BARRIERS

The prevalence of mental health disorders in Ethiopia is reported to be 18% in adults and 15% for children (Sathiyasusuman, 2011). Like other developing country children's mental health needs are high and evident from early childhood throughout adolescence. In a recent study, mothers reporting perinatal depressive symptoms indicated that they were more comfortable conceptualizing these experiences as distress brought on by an external source, such as poverty, physical ill-health or supernatural factors rather than being mental health related (Molenaar et al., 2020). Authors noted that Westernized explanations of mental health symptomology would be inconsistent with their cultural beliefs. Furthermore, these participants low empowerment status may also contribute to statements that seeking any treatments would be inappropriate for such distress. In another example, Ethiopian parents report limited interest in collaboration with non-traditional professionals for their children. This caution remained even for parents of children acknowledging the need for treatment for their children due to their cultural beliefs (Zeleke et al., 2017a).

It is also noteworthy that Ethiopian service providers too are uncomfortable about the providing Westernized mental health care. First, providers indicate that they have limited training in evidence-based practices (i.e., triaging, diagnosing, screening, and referral) that are prioritized by the West and they have some difficulty translating need for these priorities to families (Zeleke et al., 2017b). Second, they are both reluctant and under prepared for collaboration between Westernized practices and existing community practices (Zeleke et al., 2017b). Third, they are cautious about over promising how new service provisions would bridge the gap between the cultural and biomedical models when in reality there are a limited number of practitioners within the country.

There are four universities in Ethiopia offering comprehensive research and training programs (Langhaug et al., 2020). According to a 2015–2016 study by the National Mental Health Strategy (of Ethiopia), there were 40 practicing psychiatrists, 461 psychiatric nurses, 14 psychologists, and three social workers for 85 million Ethiopians. A recent healthcare workforce estimate shows Ethiopia has a low number of healthcare providers compared to other countries in East Africa (Hanlon et al., 2019). In the predominantly rural area of Ethiopia alone, mental illness comprises 11% of the total burden of diseases, with schizophrenia and depression constituting the top ten most burdensome conditions, out-ranking HIV/AIDS (Federal Democratic Republic of Ethiopia Ministry of Health, 2012, p. 9). While mental health problems constitute ∼12% of diseases within Ethiopia (Alem and Kebede, 2006), only about 2% of the health budget within the country is allocated to address mental health concerns (Desta, 2008).

Taken altogether, when considering how to prepare an effective mental health campaign to address both clinicians and the public about the range of intervention and treatments available for Ethiopians, it is important to examine how and when to bridge services. Similarly, it is important to prioritize the positive downstream effects of mental health provisions for children. Increasing treatment accessibility and acceptability will require a long-term joint effort from researchers and practitioners, as well as the central and local government, for mental health care to become a central part of Ethiopian public health that extends to parents, children, and families (Zeleke et al., 2019).

TRADITIONAL AND WESTERN APPROACHES TO MENTAL HEALTH NEEDS AND TREATMENT

The World Health Organization (WHO) defines health as a state of complete physical, psychological and social well-being that "is not merely in the absence of sickness." Furthermore, it states that the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic, or social condition (World Health Organization, 2001). The definition is holistic and growth oriented, and has guided health care provision and development of health care systems across the world since the 1940's. The conceptualization of health, however, is culturally and socially defined.

In Western societies, health is often divided into separate physical and mental categories, where disease is conceptualized as a separate influence. Disease is described as a deviation from the biological norm, rather than a part of the health continuum. In this mindset, care is deduced from symptoms, and treatment is applied to the individual aimed at changing the cause of the symptom. Invariably, whereas biomedicine is the dominant health care system in Western societies, as noted, traditional medicine is often the path patients take in developing countries (Ibeneme et al., 2017) in order to rid the body of disease.

Health and well-being in Ethiopia is best understood as a state of equilibrium among physiological, spiritual, ecological, and social factors surrounding the lives of people (Janetius et al., 2013). Poor health may be a result of an unbalanced state of these pursuits. This holistic understanding of health arose from the traditional view that health is a gift of God and evil forces can deter it. Similar popular beliefs regarding health and sickness include: the presence of supernatural forces that can enter a person's body to disturb the health; the shadows cast by an evil eye could be the sources of sickness; environmental hazards, poor hygiene, and climatic conditions, such as heat, rain, or cold wind could cause illness. Further, psychological well-being is not differentiated from physiological well-being.

In this context, health care is based on an inductive approach (i.e., traditional premises of the cause) and treatments can include adapting to the environment rather than changing it directly as in Western medicine. As such, traditional healers may be the first, and typically the only form of service delivery. Even when more Westernized services are available or accessible, people do not tend to utilize the services (Desalew and Yigzaw, 2007; Zeleke et al., 2019) and will only resort to modern mental health services after trying, and failing, with other traditional healing. In this way, traditional beliefs hindered the development of westernized service provision to those with mental health

concerns (Kortmann, 1987; Jacobsson and Merdassa, 1991; Uppal et al., 2014), especially in the rural communities (Janetius et al., 2013).

Traditions Define What Can Be Healed

Traditional treatments are thought to address a variety of concerns including, conflict within relationships, feelings of anxiety or depression and other impairing psychiatric symptoms (e.g., psychosis). Providing care as a midwife, bone setting, or conducting minor surgeries (i.e., circumcision) are common. Therefore, owing to this traditional viewpoint, people go to priests or healers for each and every sickness—physical, psychological, or emotional (Janetius et al., 2013). Evidence for success are found in family testimonials as well as an emerging literature that seeks to document the ethnobotany of medicinal plants used to treat mental illnesses in both traditional conceptualizations (e.g., evil eye, devil sickness, evil spirit, etc.) and Western conceptualizations (e.g., ADHD, depression, psychosis, etc.) of symptoms (Tesfahuneygn and Gebreegziabher, 2019).

Mental health challenges, such as adjustment disorder, depression, and anxiety are typically not recognized as a psychological problem in traditional cultures. Neurological conditions that begin in childhood, such as ADHD, are often explained as a response subsequent to psychosocial stresses linked to poverty, abuse, and neglect, rather than given an appreciation to the biological contributions of these symptoms. Although some severe psychiatric disturbances in adults loosely correspond to Western conceptualizations, the Ethiopian context recognizes only a portion of the syndromes and symptoms, even less so in children. Examining the presence of autism in Ethiopia revealed that 40.2% of parents attributed the child's diagnosis to a "spirit possession" and 27.5% of the sample attributed the child's symptoms as a result of "a sinful act" (Tilahun et al., 2016). When mental health diagnoses are not understood using Western conceptualizations, there is confusion about the importance of Westernized mental health care, which then limits the willingness to engage in it. For individuals where the onset of symptoms occurs in childhood, this can mean years of suffering that could be improved via Western mental health care. Indeed, evidence based practices used in the United States are shown to positively impact children's developmental disorders (Blueprints for Healthy Youth Development, 2018), such as autism, adjustment disorder, depression, anxiety and trauma related conditions even under economic strains (Reiss, 2013).

Traditions Define Who Can Provide Healing

Ethiopians tend to be attracted to traditional care for multiple reasons: higher cultural acceptability, relatively lower cost, accessibility, availability, shared social norms, and beliefs about the meanings cause and treatment of illness (Lambert, 2001; World Health Organization, 2001; Yemane et al., 2006; Belachew et al., 2019). Simplicity and convenience, inclusiveness, and positive personal or family experiences are also a motivator (Bannerman et al., 1993; Inter-Agency Standing Committee, 2007; Shih et al., 2010). Word of mouth, advice from friends and families, as well as referral from fellow traditional healers or even modern health care providers promulgate the influence of these healers (Mudimu et al., 2003; Tesfahuneygn and Gebreegziabher, 2019). An individual's belief systems and culturally relevant explanation of illness result in the view that healers have more extensive expertise than biomedical oriented practitioners (Alem et al., 1999; Tesfahuneygn and Gebreegziabher, 2019). Therefore, when considering implementing a mental health service system that differs from their traditional treatments, some may ignore the importance due to their strong beliefs that a traditional healer can provide the appropriate amount of care. Joining, rather than shunning, this care is likely the best path forward (Janetius et al., 2013; Workneh et al., 2020).

Who Are Traditional Healers?

Typically, traditional healers fall into the categories of faith healers, divine healers, herbalists, and mixed healers (Belachew et al., 2019). Faith healers include religious leaders that use the power of God to heal sickness and typically practice in churches, mosques, or holy water places (Rajendra, 1995). Divine healers include those who engage in ritualists or spiritualists or those who practice astrology or read zodiac signs (also known as *kalechas* and *tenquay/wizards*). Faith healers and divine healers can also be known as spiritual healers. Spiritual healers are those who are identified to have magical power, usually governed by either a bad spirit to make a person ill or a good spirit to protect from developing a mental illness. These individuals exorcize malign spirits, such as *buda* (evil eye) and *ganen* (devil) by the use of incantation, sorcery, enchantment, exorcism, and certain rituals (Alem et al., 1999). Aside from spiritual healers, herbalists use herbs, plant remedies, or extracts of animals to heal individuals and mixed healers use both rituals and herbal medicine (Belachew et al., 2019). Lastly, there are also secular healers who are involved in manipulation of the body using a variety of techniques, such as bone-setting by the orthopedic surgeon (*wegesha*), assisting births by a traditional midwife (*Yelimd awalaj)*, dressing wounds or excising affected body parts, pulling out "bad teeth," or cutting out uvula or tonsils. These traditional healers are an integral part of the society and the people, and are believed to share similar beliefs and attitudes toward all health events that occur in life (World Health Organization, 2001).

When modern medicines and therapies are presented as an updated version or an extension of traditional healing practice there have been a greater acceptance to changes in service delivery (Janetius et al., 2013; Yemataw and Mastewal, 2019). For example, as mental health service providers (e.g., counselors, psychotherapists, social workers) slowly introduce Western models of counseling and psychotherapy and that are consistent with traditional Ethiopian healing practices families have begun to replace or supplement traditional healers (Yemataw and Mastewal, 2019; Zeleke et al., 2019). Active listening, empathy, and person-centered approaches found in traditional healings are also central to Western therapist-client relationship (Zeleke et al., 2019).

Community supports evident in westernized social worker practice, can be seen as similar to the popular practice among Ethiopian Orthodox Christians called Yenesha Abat—which involves a priest serving as a family mentor or guide who makes frequent visits to the home. Again, these similarities appear to be a promising link from a traditional healing relationship to a westernized therapeutic service (Zeleke et al., 2019; Molenaar et al., 2020).

Ethiopia's Move Toward Mental Health Modernization

In 2012, with 80% of the population using traditional healing practices (Yemataw and Mastewal, 2019) the Government of Ethiopia developed and implemented the Ethiopian National Mental Health Strategy (Federal Democratic Republic of Ethiopia Ministry of Health, 2012). The strategy described goals in training mental health professionals and a desired outcome to increase effective mental healthcare delivered via primary healthcare settings. To date, most of the gains have occurred in trainings for psychiatrists, psychologists, and social workers that were subsequent to updates in professional preparation at the University of Gondar and Addis Ababa University (Wondie, 2014). In partnership, the Federal Ministry of Health also worked with WHO and the European Union and Foundation d'Harcourt to successfully implement the Mental Health Gap Action Programme (mhGAP) which aims to expand and scale up services for mental, neurological, and substance use disorders (World Health Organization, 2016). Although some increases to mental health services have begun to spread to in cities and urban centers, counseling and psychotherapy for the individual has not yet deep-rooted in Ethiopia (Janetius et al., 2013).

Alongside the country's accelerating economic and social development, however, there has been a growing acceptance of the need for *societal* mental health in Ethiopia (Lund et al., 2012; Wondie, 2014). The shift to prioritizing the collective, rather than individual, need has allowed for an acceptance of modern services. Furthermore, it appears that promoting the positive effects of a healthy family, particularly as it relates to mental health, has provided an opening toward discussions about mental well-being which is more consistent with Ethiopian health mindset. At the same time, data shows Ethiopians have been accessing their primary care physicians at an increasing rate in both rural and urban communities. With these facts in mind, there was a determination to integrate mental health and well-being care into the primary care settings already established within communities (Wondie, 2014) and in the urban-rural partnership (Workneh et al., 2020). By toggling mental care with primary healthcare, mental health care service providers could support prevention health and well-being efforts as well as treatments for acute issues. Mental health care could now include screening for symptoms, triage issues for urgency, and identifying the best approach (i.e., individually or collectively) for interventions (Zeleke et al., 2019). Placement of mental health services in primary care also opens up possibility to expand services to address child and family concerns.

CALL FOR COLLABORATIVE EFFORTS

To expand and strengthen the capacity of the overall functioning of the mental health care system and the delivery of services sensitive to Ethiopian culture, a comprehensive effort is required. At the micro-level, mental health care focuses addressing the needs of individuals including conceptualizations about the cause or origin of symptoms, delivery of a range of treatments for management of distress, as well as when to move between traditional and western practices. Meso-level priorities include monitoring of services, advocacy for expanding or targeted care and evaluation of the implementation of programs offerings provided to meet local population needs. Macro-level work requires careful attention to national level policy making, responding to advocacy requests and developing the relationship between research, professional preparation and public health initiatives. In Western cultures, individuals are familiar with addressing concerns across these levels resulting in benefits, such as: improved knowledge about the range of mental health services offered, improved attitudes and better understanding of patient's needs by service providers, and better access to and acceptability of health care services for all members of the community including children.

However, even as new primary care opportunities look promising, it is clear that Ethiopia faces many challenges (Workneh et al., 2020) related to the collaboration and integration of resources across the micro-, meso-, and macro-levels (Abayneh et al., 2020). The most obvious examples are that there is limited government support and push in, limited policies supported by funding, lack of education and training opportunities—and the ever present stigma related to mental health problems—all resulting in individuals experiencing disability, illnesses, premature mortality rates, and human rights abuses, among other challenges (Abayneh et al., 2020). The following suggestions are recommended to systematically strengthen the mental health care system and delivery of services in Ethiopia.

1. **Determine local needs (e.g., maternal and child health, perinatal distress, HIV, etc.) and resources to guide practice and policy**. The Ethiopian public and government need researchers who can provide them with updated information on how to best support their mental health care (Langhaug et al., 2020). Officials need to understand how research as an integral part of their country's development, help to destigmatize mental health views, and support evidence-based interventions that can support the mental health needs for the people they govern (Langhaug et al., 2020).

- *Provide funds for universities to engage in research*. Currently universities in Ethiopia place more weight on teaching, rather than on finding professors who will allot their time to research and scholarship (Langhaug et al., 2020). Projects related to all aspects of the mental and medical health care system should be prioritized (e.g., micro-, meso-, and macro-levels).
- *Increase Government Participation*. Without guiding policies, dedicated government effort, plans, and strategies for developing mental health systems they simply will not happen

(Langhaug et al., 2020). This requires push-in so that officials can educate themselves and others.

- Prepare to address common challenges (i.e., accessibility, acceptability, affordability, and stigma) that dissuade the use of mental health services. Articulate a country-level commitment to addressing these needs.
- Identify leaders from important sectors, such as public health, higher education institutions, technology, and the ministry of child and family who can serve as advocates.

Every health care program run by public health sectors and the minister of education (e.g., university teaching or training of health care workers) should establish a formal reciprocal relationship that includes a communication and data sharing plan. Reciprocal partnerships needs to explicitly detail a position of co-leadership and determine organizational practices that will instill trust and respect. New collaborations often fail when priorities compete and there is not a shared language to clarify intent and impact. As such, preparing processes to reconcile differences is important. The commitment to practical healthcare which similarly values the cultural and traditional differences noted among different sectors will allow for the candid discussions that can result in practical mental health outcomes for Ethiopians. For example, a predominately male healthcare workforce may not be beneficial to groups, such as women experiencing perinatal distress or mothers participating in their child's mental treatment.

Research tools and educational materials can be developed faster by establishing collaborative efforts with government officials (Zeleke et al., 2019). The intervention that promotes mental health in Ethiopia might follow from an approach aimed at the empowerment of specific groups (i.e., traditional healers, religious leaders, and herbalists) in the population because of the collective cultural practices and the reference to indigenous wisdom used by the general public. Likewise data-driven and evidence-based programs may result in good outcomes for those who will use it. Therefore, funding and support for developing these programs would be highly important for government officials to consider.

2. **Develop a Public Health Campaign to reduce stigma and focus on the collective health of society**. To prioritize the health of the next generation of Ethiopians, the mental health needs of children should be a high priority. Mental health and wellness needs to begin by addressing the mother's pregnancy and then the child's social-emotional development in the context of poverty and other prioritized stressors. Parent's need to understand how they can shape their child's development through Westernized practices that are bridged with traditional care. Such an effort needs to prioritize early intervention, as research consistently highlights its benefits in US (Blueprints for Healthy Youth Development, 2018) and may be promising for the diverse contexts (Breland-Noble et al., 2016). Given the focus on children's education, schools offer a venue for both identifying challenges and providing services.

- The gap between societal awareness and service opportunities could also be narrowed through a collaborative effort between the health and technology sectors. Although Ethiopia doesn't yet have an adequate pool of highly trained professionals to address all of the mental health issues, there is an accelerated growth in mobile and internet connectivity that could boost the development of electronic-mental health service provision.

Health professionals, organizational leaders, and community leaders have a responsibility to work collaboratively to mobilize, support, and empower mental health treatment. Therefore, they must be willing to undergo capacity building, training, engage in research, and develop a commitment to create enabling environments (Abayneh et al., 2020). With collaborative actions across government officials, community leaders, research, university professionals, health care professionals, medical professionals, and even individuals in the community, the mental health service system can be widely accepted and adapted to fit the needs of the individuals within the culture. Without working from a top-down approach, the stigma, limited education, and limited access to resources will continue. Therefore, this paper calls for action across multiple stakeholders to ensure the best support and resources related to mental health in Ethiopia. Recognizing these needs can make measurable improvements toward serving the next generation of children, and therefore improvement in societal mental health.

AUTHOR CONTRIBUTIONS

All authors listed have made a substantial, direct and intellectual contribution to the work, and approved it for publication.

REFERENCES

Abayneh, S., Lempp, H., Alem, A., Kohrt, B. A., Fekadu, A., and Hanlon, C. (2020). Developing a Theory of Change model of service user and caregiver involvment in mental health system strengthening in primary health care in rural Ethiopia. *Int. J. Mental Health Syst.* 14, 51–68. doi: 10.1186/s13033-020-00383-6

Alem, A., Jacobsson, L., Araya, M., Kebede, D., and Kullgren, G. (1999). How are mental disorders seen and where is help sought in a rural Ethiopian community? A key informant study in Butajira, Ethiopia. *Acta Psychiatr. Scand.* 100, 40–47. doi: 10.1111/j.1600-0447.1999.tb10693.x

Alem, A., and Kebede, D. (2006). "Mental disorder," in *Epidemiology and Ecology of Health and Diseases in Ethiopia*, eds H. Kloos and A. Zein (Addis Ababa: Shama Book), 493–506.

Bannerman, R. H., Burton, J., and Chien, W. (1993). *Traditional Medicine and Health Care Coverage*. Geneva: World Health Organization.

Bekele, Y. Y., Flisher, A. J., Alem, A. L., and Baheretebob, Y. (2000). Pathways to psychiatric care in Ethiopia. *Psychol. Med.* 39, 375–483.

Belachew, A., Molla, M., and Fekadu, A. (2019). Who are the traditional healers treating mental illness in rural Ethiopia? A population-based descriptive study. *BioRxiv*. doi: 10.1101/543850

Blueprints for Healthy Youth Development (2018). *Blueprints Programs*. Retrieved from: www.blueprintsprograms.com/programs

Breland-Noble, A. M., Al-Mateen, C. S., and Singh, N. N. (eds.). (2016). *Handbook of Mental Health in African American Youth*. New York, NY: Springer.

Desalew, M., and Yigzaw, K. (2007). "Determinates for suicidal attempt and ideation in adults who attended psychiatric consultation at Gondar University Hospital," in *Paper Presented at the 1 the Annual Research Conference* (Gondar).

Desta, M. (2008). *Epidemiology of Child Psychiatric Disorder in Addis Ababa, Ethiopia*. Umeå: Division of Child and Adolescent Psychiatry, Department of Clinical Science, Umea University.

Federal Democratic Republic of Ethiopia Ministry of Health (2012). *The National Mental Health Strategies (2012/13–2015/16)*. Addis Ababa: Federal Democratic Republic of Ethiopia Ministry of Health.

Hanlon, E. C., Dumin, M., and Pannain, S. (2019). *Global Perspectives on Childhood Obesity, 2nd Edn*. Cambridge, MA: Academic Press.

Hohenshil, T. H., Amundson, N. E., and Niles, S. G. (Eds.). (2013). *Counseling Around the World: An International Handbook*. Hoboken, NJ: American Counseling Association.

Ibeneme, S., Eni, G., Ezuma, A., and Fortwengel, G. (2017). Roads to health in developing countries: Understanding the intersection of culture and healing. *Curr. Therap. Res. Clin. Exp.* 86, 13–18. doi: 10.1016/j.curtheres.2017.03.001

Inter-Agency Standing Committee (2007). *ISAC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: ISAC.

Jacobsson, L., and Merdassa, F. (1991). Traditional perceptions and treatment of mental disorders in western Ethiopia before the 1974 revolution. *Acta Psychiatr. Scand.* 84, 475–481. doi: 10.1111/j.1600-0447.1991.tb03180.x

Janetius, S. T., Tibebe, A.l., and Mini, C. T. (2013). *Abyssina in the New Millennium (Revised Edition)*. Amazon CS Publication.

Kakuma, R., Minas, H., van-Ginneken, N., Dal Poz, M. R., Desiraju, K., Morris, J. E., et al. (2011). Human resources for mental health care: current situation and strategies for action. *Lancet* 5, 1654–1663 doi: 10.1016/S0140-6736(11)61093-3

Kortmann, F. (1987). Problems in communication in transcultural psychiatry: the self reporting questionnaire in Ethiopia. *Acta Psychiatr. Scand.* 75, 563–570. doi: 10.1111/j.1600-0447.1987.tb02836

Lambert, J. (2001). *Ethiopia: Traditional Medicine and the Bridge to Better Health*. Washington, DC: World Bank.

Langhaug, L., Jack, H., Hanlon, C., Holzer, S., Sorsdahl, K., Mutedzi, B., et al. (2020). 'We need more big trees as well as the grass roots': going beyond research capacity building to develop sustainable careers in mental health research in African countries. *Int. J. Mental Health Syst.* 14:66. doi: 10.1186/s13033-020-00388-1

Lund, C., Alem, A., Schneider, M., Hanlon, C., Ahrens, J., Bandawe, C., et al. (2012). Generating evidence to narrow the treatment gap for mental disorders in sub-Saharan Africa: rationale, overview, and methods of AFFIRM. *Epidemiol. Psychiatr. Sci.* 24, 233–240. doi: 10.1017/S2045796015000281

Molenaar, J., Hanlon, C., Alem, A., Wondimagegn, D., Medhin, G., Prince, M., et al. (2020). Perinatal mental distress in rural Ethiopian community: a critical examination of psychiatric labels. *BMC Psychiatry* 20, 223–233. doi: 10.1186/s12888-020-02646-5

Mudimu, C. N., Martine, P., and Anthony, M. (2003). Common mental disorders among those attending primary health clinics and traditional healers in urban Tanzania. *Br. J. Psychiatry* 183, 349–355. doi: 10.1192/bjp.183.4.349

Rajendra, K. (Eds.). (1995). "Traditional healers in South Africa: a parallel health care system," in *South Africa's Health* (London: BMJ), 1182–1185. doi: 10.1136/bmj.310.6988.1182

Reiss, F. (2013). Socioeconomic inequalities and mental health problems in children and adolescents: a systematic review. *Soc. Sci. Med.* 90, 24–31. doi: 10.1016/j.socscimed.2013.04.026

Sathiyasusuman, A. (2011). Mental health services in Ethiopia: emerging public health issue. *Public Health* 125, 714–716. doi: 10.1016/j.puhe.2011.06.014

Shih, C. C., Su, Y. C., Lio, C. C., and Lin, J. G. (2010). Patterns of medical pluralism among adults: results from the 2011 National Health Interview Survey in Taiwan. *BMC Health Serv. Res.* 10:191. doi: 10.1186/1472-6963-10-191

Tesfahuneygn, G., and Gebreegziabher, G. (2019). Medicinal plants used in traditional medicine by Ethiopians: a review article. *Adv. Vaccines Vaccin.* 2, 23–26.

Tilahun, M. A., France, B., and Tibebe, B. T. (2016). "Investigating the moderating impact of national culture in information systems security policy violation: the case of Italy and Ethiopia," in *MCIS 2016 Proceedings*, 56. Retrieved from: https://aisel.aisnet.org/mcis2016/56

Uppal, G., Swancott, R., and Crossley, J. (2014). Globalization of psychology: implications for the development of psychology in Ethiopia. *Int. Rev. Psychol.* 26, 579–584. doi: 10.3109/09540261.2014.917610

Wondie, Y. (2014). Reflection on the development of psychology in Ethiopia and future direction. *Int. Rev. Psychiatry* 26, 585–588. doi: 10.3109/09540261.2014.917611

Workneh, T. C., King, E. J., and Kloos, H. (2020). Exploring the contribution of indigenous medicine to primary healthcare in West Belesa District in northwestern Ethiopia: a qualitative analysis. *Ethiopian J. Health Dev.* 34, 1–14.

World Health Organization (2001). *Mental Health: New Understanding, New Hope*. Retrieved from: https://www.who.int/whr/2001/en/whr01_en.pdf?ua=1

World Health Organization (2016). *Mainstreaming Mental Health in Ethiopia*. Retrieved from: https://www.who.int/mental_health/mhgap/ethiopia_story_2016/en/#:$\sim$:text=In%20Ethiopia%2C%20it%20is%20estimated, neurological%20and%20substance%20use%20disorders

Yemane, B., Damen, H., and Helmut, K. (2006). *Epidemiology and Ecology of Health and Disease in Ethiopia*. Shama Books.

Yemataw, W., and Mastewal, A. (2019). Westernization versus indigenization in the context of mental health: training and services in Ethiopia–University of Gondar in focus. *Int. J. Mental Health* 48, 257–271. doi: 10.1080/00207411.2019.1644139

Zeleke, W., Chitiyo, M., and Hughes, T. L. (2017a). The path to an autism spectrum disorders diagnosis in Ethiopia: parent perspective. *Am. J. Orthopsychiatry* 88, 316–327. doi: 10.1037/ort0000249

Zeleke, W., Chitiyo, M., and Hughes, T. L. (2017b). Behavioral and educational interventions received by children with autism in Ethiopia. *Int. J. School Educ. Psychol.* 6, 176–187. doi: 10.1080/21683603.2016.1278568

Zeleke, W. A., Nichols, L. M., and Wondie, Y. (2019). Mental health in Ethiopia: an exploratory study of counseling alignment with culture. *Int. J. Adv. Counsel.* 41, 214–229. doi: 10.1007/s10447-018-9368-5

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Sociology

SYSTEMATIC REVIEW
published: 02 February 2021
doi: 10.3389/fsoc.2020.583864

A Systematic Review of Culturally Responsive Approaches to Child and Adolescent Mental Health Care in Ethiopia

Hana Shewamoltot Meshesha and Veronica Johnson*

Department of Counseling, University of Montana, Missoula, MT, United States

In 2012/2013, the prevalence of child mental illness was estimated to be between 12 and 25% in Ethiopia. The Federal Ministry of Health is currently considering the implementation of the second national mental health strategy guided by the World Health Organization's pyramid model for an optimal mix of services. This model states self-care as the fundamental concept and practice that can be facilitated by the formal and informal sectors surrounding an individual. Despite this remarkable move toward endorsing contemporary approaches to mental health services, Ethiopia struggles with a limited number of knowledgeable and skilled mental health professionals. This systematic review aims at identifying the main challenges Ethiopia might face while implementing the pyramid model. We will suggest ways to bridge the gap between the need for child/adolescent trained mental health professionals and training mental health professionals informed with the value of integrating the concepts of the pyramid model into the system of mental health care for Ethiopians. The paper also discusses the importance of integrating the Wellness based mental health approach into mental health professionals' training as a means of developing a culturally responsive approach to child and adolescent services. This review provides implications for further studies and mental health policy, systems and services in Ethiopia.

Keywords: wellness approach, pyramid model, child and adolescent mental health, Ethiopia, culturally responsive

OPEN ACCESS

Edited by:
Waganesh A. Zeleke,
Duquesne University, United States

Reviewed by:
Aspasia Serdari,
Democritus University of Thrace, Greece
Tammy L. Hughes,
Duquesne University, United States

****Correspondence:***
Hana Shewamoltot Meshesha
Hana.meshesha@umontana.edu

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Sociology

Received: *15 July 2020*
Accepted: *21 December 2020*
Published: *02 February 2021*

Citation:
Meshesha HS and Johnson V (2021) A Systematic Review of Culturally Responsive Approaches to Child and Adolescent Mental Health Care in Ethiopia. Front. Sociol. 5:583864. doi: 10.3389/fsoc.2020.583864

INTRODUCTION

Ethiopia developed its first National Mental Health Strategy (NMHS) in 2012/2013. This NMHS was an initiative by the Federal Ministry of Health (FMOH) intended to be implemented within 5 years (Federal Ministry of Health, 2012: 1–4). The strategy was initiated following the assessment of the barriers for achieving the Millennium Developmental Goals (MDGs). The strategy recognizes the relevance of well-being focused mental health services and specifies activities in line with the five-tiers of the World Health Organization (WHO) pyramid of mix of mental health services (Federal Ministry of Health, 2012: 18). In the document, the FMOH stipulates the prevalence of major mental health issues in Ethiopia. Specifically, it reported that the prevalence of childhood mental illness ranges from 12 to 25% (information on types of mental health disorders was not provided). Furthermore, the prevalence of completed and attempted suicide rates was stated as 7.7/100,000/year and 3.2% respectively, although, no specific demographic information was provided to better understand the prevalence among children and adolescents (Federal Ministry of Health, 2012:

11). Based on data collected in 2016, the World Health Organization (2019: 19) reported the age-standardized suicide rate in Ethiopia was 11.4 with males having a higher rate (18.7) compared to females (4.7). The World Health Organization (2019, 11) global report states that suicide rates are higher at younger ages—adolescents living in low-income and middle-income countries constituting the majority of deaths by suicide. These prevalence rates demand attention in an effort to build a comprehensive mental health system for Ethiopians.

In 2019, as part of a mental health forum, the FMOH identified more specific categories of mental health problems among children and adolescents on its website, i.e., ADHD, oppositional defiant disorders/conduct disorders, anxiety disorders, mood disorders, elimination disorders, and autism spectrum disorders, with prevalence rates of 12–25%.The report showed an increment in suicide rates and the prevalence of alcohol and substance use disorders across a 10-year span. The report also showed a 21.56–27.9% prevalence for "common mental health disorders" (depression, anxiety and psychological distress) by referring to a meta-analysis [author(s) unspecified] conducted in 2018 (http://www.moh.gov.et/ejcc/am/node/170). However, the report did not include information on specific demographic variables. Although FMOH did not portray its data against the prevalence rates of mental disorders in the other countries, based on a report published in World Health Organization (2017b), the WHO stated that about 20% of children and adolescents experience mental health problems globally (https://www.who.int/health-topics/mental-health#tab=tab_2). The lack of specificity in the data provided by FMOH could be a deterrent in the implementation of the NMHS as well as the provision of preventative and mental health care treatment for Ethiopians.

According to a study by Hanlon et al. (2017: 8–9), there is a great deal of support at the national leadership level for mental health services in Ethiopia. However, governance at the grassroots level, among primary health care workers, is not to the level that meets the needs of the community. In 2017a, in its members' status report, the WHO reported low numbers of mental health professionals in Ethiopia in comparison to the total population and to the prevalence of mental health problems (World Health Organization, 2017a: 1). The report indicated a total of 1,739 mental health professionals were working in both governmental and non-governmental sectors at the time. The rate of psychiatrists per 100,000 was 0.08% and the rate for mental health nurses was 1%. The rate of other mental health professionals such as psychologists, social workers and other paid mental health workers accounted for 0.04, 0.04, and 0.54%, respectively (World Health Organization, 2017a: 1). Addressing the mental health needs of Ethiopians requires the availability of a knowledgeable and skilled human resource. The integration of mental health services into the mental health system also needs to be culturally sensitive to the individuals in need for a successful outcome.

Several studies related to mental health issues in Ethiopia focus on the role of the intersectionality of client identities into the mental health services provided (e.g., Ghebrehiwet et al., 2019; Chisholm et al., 2020). There are also a number of studies emphasizing causal factors, challenges and successes in service provision for mental health services (e.g., Hambisa et al., 2020). However, there few studies conducted focusing on the preparedness and/or the training of mental health professionals from a culturally responsive perspective. The studies conducted to assess the challenges faced by mental health professionals in providing for Ethiopians in need are also limited (e.g., Hanlon et al., 2017; Wondie and Abawa, 2019; Zeleke et al., 2019). This systematic review was intended to suggest a culturally responsive approach to mental health services for children and adolescents in Ethiopia through building the capacity of mental health professionals. The aim of this review is to promote discussion about the systemic approaches and strategies for mental health services in Ethiopia. First, it is important to address some of the unique aspects of Ethiopian culture that provide context and rationale for a specific strategy to address the mental health needs of children and adolescents in Ethiopia.

The perceptions of Ethiopians regarding the causes of mental disorders and individuals' preferred treatment options play a significant role for how the formal and informal mental health care system interact. For instance, Abera et al. (2015: 6) reported that a significant percentage of parents mentioned supernatural powers (e.g., evil spirits, God's will, curse. . .) causing mental disorders among children and adolescents. In this study, parents reported that they would prefer to seek religious and traditional mental illness treatment modalities as opposed to formal health care. Abera et al. (2015: 7) also revealed that the majority of parents recognize the role of genetic and environmental factors (e.g., family financial problems, divorce, and abuse) as causal factors for child/adolescent mental illness. Recognizing mental health symptoms at a microsystem level plays a significant role in early detection and provision of treatment of mental disorders among children/adolescents. According to some studies, Abera et al. (2015: 7) and Kerebih et al. (2018: 6), parents and teachers recognize mental disorders with externalized behaviors compared to those with internalized behaviors. In addition, although externalized behaviors are recognized, parents and teachers do not associate the behaviors with mental disorders and seek professional support.

The above studies show that the perception of mental health in Ethiopia is guided by spiritual beliefs that seem to associate biological and environmental factors with the causes of mental illness. As a result, the effective implementation of a mental health strategy needs to bring the informal sector to the table for a shared meaning and vision to be created among Ethiopians and to serve those in need. The mental health system in Ethiopia, guided by the NMHS through the WHO comprehensive pyramid model, could be supported by integrating the wellness approach to mental health. The wellness model emphasizes individual wellbeing as a focus of mental health care providing opportunities for professionals to integrate cultural, spiritual, biological and environmental factors contributing to mental disorders.

MATERIALS AND METHODS

We conducted a literature review on mental health in Ethiopia, using Google, Google Scholar and PsychINFO search engines and websites of organizations such as the WHO, FMOH, and Federal Ministry of Education (FMOE). In the literature identification process, for research articles, the search criteria included: research conducted in Ethiopia, research focused on integrating cultural factors into the mental health service provision, mental health among children and adolescents, research that has a framework or a systemic approach to addressing mental health issues and services in Ethiopia, and research studies integrating the concept of a wellness approach. For research articles, studies published between 2014 and 2020 were included. This time period was chosen to include studies conducted following the implementation of the first NMHS in 2012/2013. Research articles were excluded if the study was focused on clinical trials, was non-peer reviewed and focused on non-systemic or framework-oriented research. For other framework and approach-oriented publications, the publication dates were considered between 2000 and 2020. Publications included under the "other framework and approach-oriented publications" were specific to the WHO's Pyramid model, the Wellness Model and the Indivisible Self-Model. For fundamental conceptual paradigms (e.g., concept of wellness, the WHO's Pyramid model), original publications were reviewed and their publication year dated back to 2000. During the identification, 28 research articles and 21 other publications were identified. Of these, three articles and five other publications were removed due to duplication.

During the screening process, research studies were included that focused on systemic reviews of the mental health systems and policy in Ethiopia, training of mental health professionals, and expanding/alternative approaches to mental health services. Research studies that focused on causes of mental illness, mental health disorders and their consequences, mental health training for professionals, child trafficking, food insecurity and mental health, mental health among women, mental health among college students, and mental health in specific ethnic, economic and ways of life were excluded. For other publications, contents that did not provide general guidance on the framework and approaches to mental health were excluded. Accordingly, 12 research studies and 20 other publications were selected. Of these, 27 articles and other publications were chosen for inclusion in this review.

The eligibility process for selecting articles and publications emphasized the first NMHS and the WHO's pyramid model of optimal mix of mental health services as guiding mental health service approaches for an Ethiopian context. These documents were chosen to be the focus for the following reasons. First, the NMHS was the first of its kind that Ethiopians developed to tackle the barriers identified during the implementation of MDGs. As a result, it provided information on national level directions. Second, the NMHS emphasizes the role of the WHO's pyramid model of optimal mix of mental health services as a guiding strategy to organize national and local level mental health services. The model is used as a reference for training community-based mental health professionals in Ethiopia. As a result, the pyramid model allows a review of the training of mental health professionals according to the mental health service approach endorsed by FMOH. Third, the emphasis of the WHO's pyramid model of optimal mix of mental health services on self-care and informal care systems allows the integration of culturally responsive mental health services. As a result, nine articles and 10 other publications were included in the qualitative data synthesis.

RESULTS

Systematic Reviews and Meta-Analyses

This systematic review of relevant and timely publications illustrates the WHO's pyramid model of optimal mix of mental health services, the mental health profile of Ethiopia, mental health professionals practicing in Ethiopia, and ways to bridge the gap between the need for mental health services and integration of a comprehensive approach to such services. The following table shows the type of articles and publications used in the synthesis of this review and the common themes that emerged.

In **Table 1**, the common themes that emerged included cultural factors that researchers indicated either as barriers to the implementation of effective mental health services or indicated as relevant factors to be considered in mental health services. The themes also included organizational, theory and approach-based recommendations for mental health services. The training, challenges and success of mental health services were identified. These common themes were further organized as culture and mental health in Ethiopia, WHO's model for comprehensive mental health services, mental health professionals in Ethiopia, bridging the gap: the wellness model of mental health, on-the-job training for school-based professionals and adoption of child/adolescent specific mental health initiatives.

Culture and Mental Health in Ethiopia

In multiple mental health status reports, it is common to see the lack of specific information on Ethiopia's systems of assessment and intervention for mental health disorders. The NMHS states cultural factors as reasons contributing to the inability to gather accurate data on the prevalence of mental health problems and providing professional services (Federal Ministry of Health, 2012: 12). Specifically, the challenge is associated with the fact that many Ethiopians associate severe mental illness such as schizophrenia and mood disorders with spiritual causes. This data is also supported by Zeleke and colleagues' (2019: 224) study suggesting that "cultural myths" about the source of mental illness as a curse present challenges for mental health professionals in their counseling practice. Moreover, mental health issues like depression and anxiety are often managed in informal relationships and spiritual-based care (Federal Ministry of Health, 2012: 12). Individuals commonly decide to seek treatment from religious leaders and healers rather than seeking professional support. This has resulted in fewer opportunities for early detection of depressive symptoms that

TABLE 1 | Description of studies included in this review.

Author(s) (Year of publication)	Type of publications	Topic/variables	Main themes of publications
Ahmed et al. (2019)	Original research	Mental illness service provision and associated factors	Knowledge, attitude, and practice among health extension professionals
Adler [(1927) 1954]	Theory	Individual psychology	Wholistic approach to mental health
Assefa et al. (2019)	Systemic review and synthesis	Community health extension program of Ethiopia	Challenges for mental health professionals
Desta et al. (2017)	Original research	Empowering preschool teachers to identify mental health problems	Integrating mental health services in schools
Faregh et al. (2019)	Original reflection and overview	Considering culture, context and community in mhGAP implementation and training	Field perspective on *mhGAP trainings*
FMOE (2019)	Annual report	National annual enrollment	Percent of children and adolescents in schools
FMOH (2012)	Strategy document	National mental health strategy	Mental health profile Challenges to mental health services The optimal mix of mental health services
Kebede (2019)	Original research	Social work education in Ethiopia	Expanding mental health services
Myers and Sweeney (2004) and Myers and Sweeney (2008)	Original research	Wellness model The indivisible self-model	Wellness based approach Wellness wheel
Sixty-Sixth World Health Assembly (2013)	Meeting minute	Comprehensive mental health action plan	Conceptualizing mental health
WHO (2003a)	Policy and service guidance	Caring for children and adolescents with mental disorders: Setting WHO directions	The optimal mix of mental health services
WHO (2003b)	Policy and service guidance	Organization of services for mental health: Mental health policy and service guidance package	The optimal mix of mental health services
WHO (2009)	Guidance to improve mental health services	*Improving Health Systems and Services for Mental Health*	Cultural integration into mental health services
WHO (2016a)	Training manuals	*mhGAP* training of trainers manual	Guide for training of trainers of community health workers
WHO (2016b)	Training manuals	*mhGAP Intervention Guide*	Training of community health workers
WHO (2017a)	Report	Mental health profile of Ethiopia	Profile of mental health professionals Existence of strategy and plan
Wondie (2014)	Reflection	Development of psychology in Ethiopia and future directions	Overview of mental health training fields in Ethiopia
Wondie and Abawa (2019)	Original research	Westernization vs. indigenization	Lack of utilizing indigenous cultural resources in mental health services
Zeleke et al. (2019)	Original research	Counseling alignment of culture	Challenges for mental health professionals Cultural factors Wellness approach

might have resulted in support for individuals with suicidal ideation (Federal Ministry of Health, 2012: 12). Furthermore, the lack of mental health professionals at primary health care facilities adds to the difficulty of obtaining accurate early identified symptoms. Therefore, to tackle the problem, national goals such as adopting the pyramid model of optimal mix of mental health services to focus on patient-based care, community involvement, integrating mental health services in health extension programs, monitoring and evaluation, and collaborating with higher education institutions that prepare mental health professionals were emphasized (Federal Ministry of Health, 2012: 3–4).

After the implementation of the first NMHS, Ethiopia is currently working on the second NMHS, with the intent of incorporating the successes obtained and lessons learned during the implementation of the first NMHS (http://www.moh.gov.et/ejcc/am/node/170). Moreover, FMOH, through the NMHS, is still using the WHO's pyramid model for a combination of services contributing to quality mental health services (Federal Ministry of Health, 2012: 18). In its forum on mental health situations in Ethiopia, a presentation entitled *Strategies for Promotion and Prevention and Rehabilitation in Mental Health in Ethiopia* included self-care as the fundamental component of mental health based on the pyramid model (http://www.moh.gov.et/ejcc/am/node/171). The mental health wellbeing approach as a framework for future mental health initiatives and services in Ethiopia was also addressed.

The WHO's Model for Comprehensive Mental Health Services

Providing quality mental health services requires the integration of multiple levels of services involving the individual, informal care and formal care services. The World Health Organization (2003b: 34) identified a model that can be used as a framework for coordination of mental health services, and also as a guide or framework for member countries to improve the mental health care in their specific cultural context. While countries may choose to design their own respective comprehensive models of mental health services, the pyramid model of optimal mix of mental

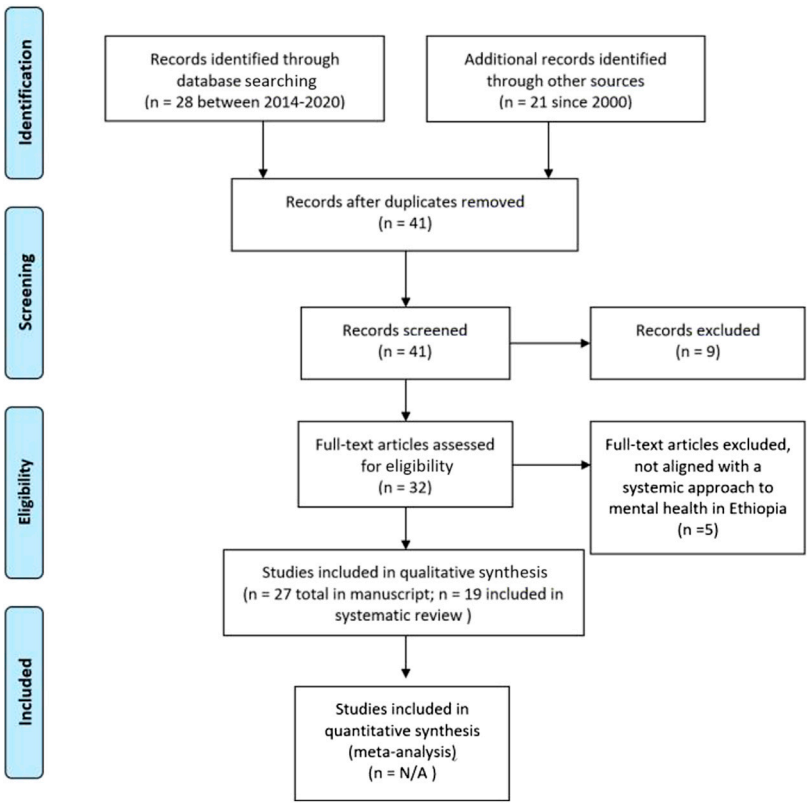


FIGURE 1 | Literature identification procedure (Moher et al., 2009: 3).

health services underlines the basic components that help services to be accessible to individuals in need. In 2009, the WHO stated: "there is no single organizational model for good service delivery, there are common factors that underlie successful approaches" (World Health Organization, 2009: 21).

In **Figure 2**, self-care is identified as the foundation for other formal mental health care services. The awareness and intentional use and modeling of self-care strategies by an individual could result in less time in mental health facilities which, in turn, becomes less costly for both the individual and the nation. The availability and integration of informal community care, such as neighborhood-based self-help groups, faith-based groups for children and adolescents, neighborhood gatherings and other informal regular group events designed for celebrations and support could enhance individuals' perception of acceptance and care while they are taking care of themselves. In this case, the role of formal health care can be providing information to raise awareness about preventive strategies for mental illness, such as educating parents how to recognize mental health issues and implementing strength-based approaches to help their children. Parents/caregivers can be taught how and when to seek professional help and what their role is in supporting the intervention provided by mental health professionals. Neighbors, faith-based group leaders and self-help group leaders can be trained in strength-based community support strategies to help children and adolescents in their communities.

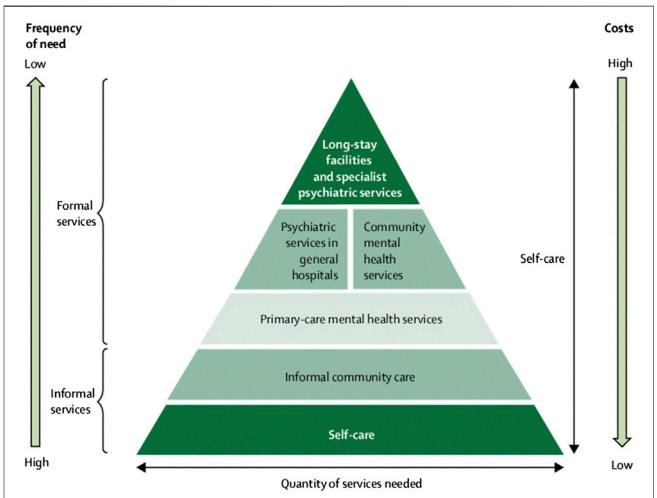


FIGURE 2 | WHO service organization pyramid model for comprehensive services in mental health.

Stakeholders in the informal care system can also impart their rich knowledge and experience to the formal system by indicating how the community perceives mental health, what symptoms represent what mental disorders, how traditional treatment (e.g., spiritual based practices) can support the formal system, and so

on. The informal care system can be used as an ally to support the formal professional service with evidence-based culturally sensitive education. In addition, the informal care system can be best utilized by integrating mental health education that integrates wellness including spiritual wellbeing. The WHO's model for mix of mental health services addresses the well-being of individuals with acknowledgment of cultural norms and values around the person. The focus on self-care as an underlying component also provides a foundation for integrating personal and cultural identities as well as an opportunity to address the intersectionality of the two factors.

In its guidelines for caring for children and adolescents with mental health issues, the World Health Organization (2003a: 7) indicates that diagnosis of mental health disorders should not be done based on just one cultural perspective. It is essential to integrate the relevant culture-based information in assessment and diagnostic processes. The guideline also indicates the need to effectively utilize resources that are immediate to the child or adolescent in need, i.e., family members, neighbors and religious leaders for both efficacy and efficiency. Furthermore, the WHO stresses the need to adopt a wellness-based approach to managing mental health issues, specifically when helping children and adolescents. The WHO's 5-year mental health action plan is in place until the end of 2020. Within the action plan, the World Health Assembly states the following:

> This action plan. . .. conceptualized mental health as a state of well-being in which the individual realizes his or her own abilities, ...With respect to children, an emphasis is placed on the developmental aspects, for instance, having a positive sense of identity, the ability to manage thoughts, emotions, and to build social relationships, as well as the aptitude to learn and acquire an education, ultimately enabling their full active participation in society (Sixty-Sixth World Health Assembly, 2013: 3).

In the above conceptualization, mental health intervention requires a well-rounded developmental approach for children. It addresses the holistic approach that needs to be included to ensure the well-being of children, to support them in achieving their full potential, and encouraging their participation in their society. In speaking of the mental health needs of children in Ethiopia, it is critical to review the system of mental health services for adults, as knowledge of mental health issues, access to mental health care, and implementation of effective treatment strategies all require the involvement and endorsement of adult caregivers.

Ethiopia, as stated in the NMHS, endorsed the pyramid model in its strategy and designed several activities to be implemented accordingly. The strategy includes specific goals designed to improve the decision-making ability of individuals, awareness-creating and skill-development trainings as goals at the informal care level and specific strategies at the primary health care levels. Most of these advocacy, awareness-raizing and skill-development activities were planned to be implemented by health extension workers after receiving training in the area (Federal Ministry of Health, 2012: 23–25). The integration of wellness-based approaches into mental health services requires orienting the health extension workers and mental health professionals to the approach and its implementation to meet the needs of individuals with mental health problems.

Mental Health Professionals in Ethiopia

Professional mental health training for college-level social science students is a recent development in the formal educational system of Ethiopia. Modern psychology was introduced in the 1950s and its training focused on guidance and counseling and educational measurement (Wondie, 2014: 585). Later, other fields in psychology such as developmental psychology and social psychology were established in graduate level programs.

Along the educational expansion in Ethiopia, other mental health fields such as social work were established at the undergraduate and graduate levels in several universities across the country. Currently, most first-generation and second-generation public universities in Ethiopia have programs in psychology and/or social work. For instance, social work programs are available in 13 Ethiopian universities (K 2019: 5). Most first-generation universities that have undergraduate programs also have graduate level programs in those fields. However, it is not clear how many students graduated from those programs thus far. The lack of national data on the number of mental health graduates from Ethiopian universities and their placements creates a challenge in portraying the work of these professionals. The coordination of services between these mental health professionals and the formal health care system is not well known. It is unclear whether/how these mental health professionals are trained to familiarize themselves with either a wellbeing approach or the WHO's model of optimal mix of mental health services. In our research, we were able identify that the undergraduate psychology curriculum provides the opportunity for students to learn about child and adolescent developmental milestones but does not address individual well-being as a concept or as an intervention strategy.

The WHO's report depicts a clear picture of the lack of mental health professionals to address the mental health needs of the people in Ethiopia. The report only included one child psychiatrist for the whole country. Most of the outpatient mental health services report no specific categories of services offered or an annual policy/plan for development (World Health Organization, 2017a: 1). This clearly shows, on one hand, the obvious lack of professionals in the country and, on the other hand, the problems in efficiency of reporting systems. It seems that FMOH reports the number of mental health professionals working in medical facilities. This number is in contrast to the number of students graduating each year from universities in different helping professions who either decided not to (or who did not have the opportunity to) join the health care system. This suggests a lack of coordination between universities that train mental health professionals and existing mental health services in Ethiopia that serve adolescents and children with mental health issues. For instance, although the number of mental health workers in school settings might be low, it is worth reporting them as part of the mental health workforce. Both the WHO and

NMHS did not report the mental health professionals working in schools. However, there are indications of the presence of mental health professionals in schools. These professionals are mostly first-degree psychology graduates, master's graduates in social psychology and school psychology graduates primarily working with adolescents. School psychology is a program provided by one of the pioneer universities in Ethiopia, Bahir Dar University (https://bdu.edu.et/febs/). Graduates of the School Psychology program would be a valuable resource to support the mental health services provided in schools. However, there is no status data that reports the number of graduates from this program thus far or their placement status after graduation. Even with a well-coordinated utilization of all mental health professionals, Ethiopia could still encounter a substantial lack of mental health professionals. The shortage of mental health professionals would be even higher in providing services to children and adolescents since 46.5% of the Ethiopian population is under the age of 14 (https://data.un.org/en/iso/et.html).

Due to low number of adequately trained mental health professionals, Ethiopia largely depends on health extension workers to integrate mental health services into their prevention and intervention work on physical health. "Health extension workers are Ethiopia's version of a large-scale community health workers (CHWs) program" (Assefa et al., 2019: 2). Health extension workers are members of a community (grade 12 graduates–sometimes with some health training experience) who are chosen by their respective district health service leaders to provide basic health and medical care to their community. However, these workers do not receive the relevant training required to assess, diagnose and intervene with individuals struggling with mental health problems. Ahmed et al. (2019: 6) indicated that a majority of urban health extension workers did not have the scientific knowledge of mental disorders and held unfavorable attitudes toward individuals with mental disorders. Most of these professionals perceived people with mental disorders as dangerous, unpredictable and better off in an institutionalized setting. In the same study, it was found that a majority of professional health extension workers believed mental disorders are curable and counseling and medication would be helpful. Although this is a single study, it clearly shows the dilemma health extension workers are facing. On one hand, they appear to accept cultural myths as causation for mental disorders just like any member of a community. On the other hand, they appear to believe in evidence-based interventions as a means of supporting individuals with mental health issues. This conflict, perhaps experienced by others in Ethiopia, results in individuals not receiving culturally responsive intervention training to address mental health issues and to promote overall wellness.

FMOH, in collaboration with the WHO, has been providing mental health Gap Action Program (mhGAP) trainings to health extension workers, in an attempt to address the lack of trained mental health professionals. The mhGAP is intended to equip primary care providers and their trainers with a model guide to mental health disorders, knowledge and skill on assessment, diagnosis, and intervention (World Health Organization, 2016a: 3; World Health Organization, 2016b). The training for health extension workers has been identified to be significantly improving their knowledge, attitude and skill. These trainings are aimed toward equipping health care providers with the information and skill that is required to work with individuals at the grassroots level (Faregh et al., 2019: 7). The training manual includes 5–6 days of basic mental health training so the primary care professionals can integrate knowledge of mental, neurological and substance use disorders into their service and reporting. In an Ethiopian context, there have been a significant number of health extension workers who have been trained with mhGAP training. The mhGAP version 2.0 Training manual for training of trainers (field testing version) specifies the length of training for each major area included in the manual (World Health Organization, 2016a: 61). For example, the length of training for child and adolescent mental and behavioral disorders is 5.8 h of which 3 h are allocated for assessment and management of mental health disorders (2 h on assessment and 1 h on management of mental health disorders), depression is 4.5 h and self-harm/suicide training is 3.75 h (World Health Organization, 2016a: 249). Comparatively, university programs across the world that train mental health professionals range anywhere from 2 to 8 years, and typically are degree-granting programs. While any training is better than none, it is clear that 16 h of training in child/adolescent mental health-related issues does not equate to a degree that prepares professionals to recognize symptoms, and to provide culturally responsive intervention strategies.

Despite the mhGAP training's brief duration, several findings support the significant improvement in the knowledge, attitude and skill of mental health professionals after the training. However, studies conducted among mental health professionals indicated the perceived challenges in the implementation of culturally sound evidence-based therapeutic techniques. Cultural factors were identified as a challenge in the training of mhGAP for mental health professionals. In a reflection study of 6 years of experience in implementing the mhGAP training in six developing countries including Ethiopia, a study by Faregh et al. (2019: 4) identified that mental health professionals share some cultural beliefs with their community such as a stigma toward individuals with mental disorders. This study also explored mental health professionals' beliefs that the cause of mental health problems was due to spiritual causes (e.g., curses) or the person's responsibility. Moreover, the authors suggested that trainees may not have gained the clarity on how to translate and apply what they had learned in their mhGAP training into their practice. The study suggests that trainees may face real-life situations without the preparation and knowledge about comorbidity of mental and physical symptoms, as this is not well addressed in the training.

In a recent study that explored the indigenizing of westernized therapeutic techniques for Ethiopian communities, Wondie and Abawa (2019: 9) found that mental health professionals identified a challenge in adapting the theoretical concepts they learned through formal education to practical implementation. Participants in this study identified cultural perceptions of the causes of mental health problems (associating the cause of

schizophrenia to spiritual powers), and perceived severity of mental health problems (minimizing anxiety and depression) and, therefore limiting the transferability of western-based therapeutic techniques to Ethiopians. Most absent from their knowledge-base were culturally tested techniques that would add to their ability to respond effectively to cases they are presented with. Another study by Zeleke et al. (2019: 226) supported the finding that cultural beliefs among community members is one of the greatest challenges of mental health workers. The authors identified that mental health professionals believed they needed more training on providing mental health services. Zeleke et al. (2019: 217) also pointed out the dominance of the medical approach as the primary model for teaching mental health professionals in Ethiopia. This in turn leads to the use of diagnostic-based approaches to address mental health issues. Participants in both studies identified the knowledge and skill gap, as well as a lack of culturally appropriate counseling skills to help their clients.

The medical approach or assessment-oriented mental health approach is prominent in the curricula of both undergraduate and graduate programs in psychology in Ethiopia. Since program curricula, especially for undergraduate programs, is harmonized across the country, all graduates learn using very similar course syllabi. For instance, the undergraduate psychology program, although it does include courses on child and adolescent development, testing and practicums, it lacks the integration of a relationship-focused wellness-oriented approach to mental health interventions. In the graduate level programs in clinical and social psychology, Counseling I and Counseling II courses emphasize the role of relationship between the counselor and the client. However, these courses do not include either a wellness approach or an emphasis on the relevance and intersection of self-care and informal community care, as recommended in the WHO pyramid model of comprehensive mental health services. Moreover, the practical work requirement (e.g., clinical psychology graduate program at one university) requires more hours for presenting diagnostic cases than designing interventions. This indicates the emphasis on identifying the psychopathology and becoming equipped with assessment tools and diagnoses based on Western diagnostic criteria, i.e., *Diagnostic and Statistical Manual of Mental Disorders,* fifth edition (DSM-5, 2013) published by the American Psychological Association while the intervention is given less focus. Although the *DSM-5* provides guidance in diagnosing mental disorders, the limited representation of cultures like Ethiopia in the process of conducting research to identify symptoms for a particular disorder puts Ethiopian professionals in a difficult position. For instance, the general perception of some symptoms of depression and anxiety among community members as acceptable reactions to life circumstances was one of the challenges identified by mental health professions in their effort to diagnose mental health disorders and deliver interventions for individuals (Wondie and Abawa, 2019: 8). Similar challenges can be experienced by providers using the *International Classification of Diseases and Related Health Problems 10th Revision* (World Health Organization, 2016) since there is no known culturally

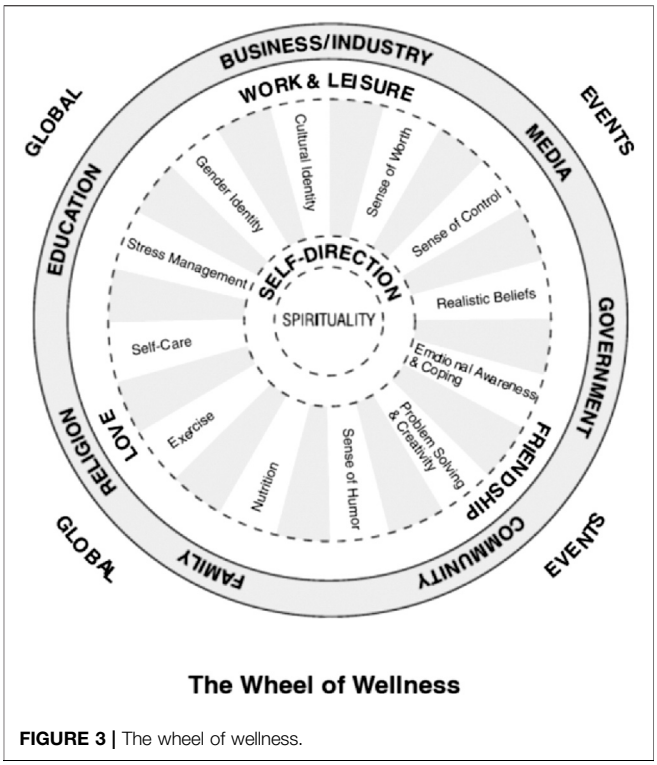


FIGURE 3 | The wheel of wellness.

sensitive language translation and symptoms interpretation manual for use by Ethiopian mental health professionals. The lack of culturally sensitive and contextualized tools may present a challenge to mental health professionals when they face real-life practical cases that require translating what they learned in class into diagnosis and treatment planning. Practicing health professionals are also challenged with accessing supportive resources for themselves when faced with difficult cases that they feel unprepared or presented with less resources to manage.

Mentorship and supervision are one of the most reliable ways to strengthen the skills of early career professionals as they develop the necessary knowledge, attitude and skill to work effectively. Due to the lack of appropriately trained mental health professionals, Ethiopia also faces a challenge of having a system for supervising front line workers. Feregh et al. (2019: 6) identified the lack of follow up and supervision procedures that could enhance the implementation of mhGAP training knowledge, attitude and skill. The study specifically indicates that, in Ethiopian health care systems, mental health trained professionals did not have the training to supervise primary health care providers, contributing to the absence of an existing supervision system for health care workers in their practice of diagnosis and therapeutic intervention for their clients. With self-care at the foundation of the WHO pyramid model, it makes sense to emphasize the self-care needs of Ethiopian children and families as a method of bridging the gap between professional mental health training and culturally responsive mental health interventions. Perhaps the wellness model (Myers and Sweeney, 2004: 234–235; Myers and Sweeney, 2008: 483) could provide health care workers with

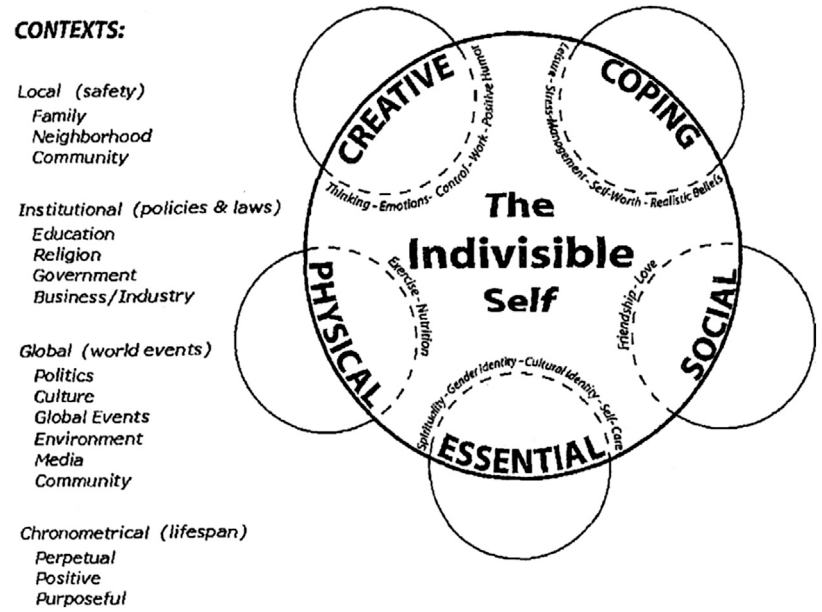


FIGURE 4 | The indivisible self model.

practical tools to assist in their intervention efforts with children and families, further developing culturally responsive interventions and promoting the overall wellness of Ethiopians (Myers and Sweeney, 2008: 487–488).

Bridging the Gap: The Wellness Model of Mental Health

In the 1980s Myers and Sweeney developed the Wheel of Wellness, based on the Individual Psychology of Adler [(1927) 1954]. The Wheel of Wellness integrated concepts that contribute to holistic and healthy living, quality of life, and longevity. The Wheel of Wellness arose from Adler's life tasks of work, friendship, love, and later self and spirit (Mosak and Dreikurs, 1967, as cited in Myers and Sweeney, 2004: 235). The Wheel of Wellness, and later the model of the Indivisible Self, take into account diversity and cultural considerations that make it applicable to many difficult cultural contexts. **Figure 3** is a depiction of the original Wheel of Wellness developed by Witmer et al. (1998).

At the center of the wheel is spirituality, which in most cultural contexts is considered the most significant aspect of overall wellness. In an Ethiopian context, as many studies indicated (e.g., Faregh et al., 2019; Wondie and Abawa, 2019; Zeleke et al., 2019), spiritual beliefs seem to guide individuals' understanding of the causation and preferred interventions for mental disorders. Enabling mental health professionals/workers to recognize the relevance of spirituality in the intervention for mental disorders would help the individual to feel supported and validated.

Directly around spirituality is self-direction, associated with each spoke of the wheel surrounding it. Depending on cultural context, self-direction could include an orientation toward family and community that influences an individual's self-direction, if part of a collectivist culture as opposed to an individualist culture. Each spoke of the wheel represents tasks associated with achieving balanced wellness and mental health—cultural identity, sense of worth, sense of control, realistic beliefs, emotional awareness and coping, problem solving and creativity, sense of humor, exercise, self-care, stress management and gender identity (Myers and Sweeney, 2004: 236). It is reasonable to assume that the spokes of the wheel are relevant at certain points in time, some more relevant than others. While the ideal would be to achieve a balance of wellness in each spoke of the wheel, it is more likely that attention shifts to different aspects of wellness as needed and in response to mental health issues that present. Each task surrounding self-direction is oriented toward achieving Adler's tasks of work/leisure, friendship, and love.

Life forces that affect personal wellness, such as religion, family, education, business/industry, media, government and community surround the individual in the wheel of wellness, and on a larger scale, global issues and current events are addressed as contributing to overall wellness (Myers and Sweeney, 2004: 236). Further research revealed a better representation of overall wellness, pictured below in **Figure 4**: The Indivisible Self evidence-based model of wellness (Myers and Sweeney, 2004, 236; Myers and Sweeney, 2008, 484).

The Indivisible Self model includes all of the components of the original Wheel of Wellness, but reduces specific factors influencing overall wellness into more conceptual factors that encompass the many tasks formerly associated with the Wheel of Wellness. In addition, the new model acknowledges cultural contexts, as well as developmental life stages. This new model is accessible to individuals at all stages of the lifespan, in all cultural contexts (Myers and Sweeney, 2004, 239–240; Myers and Sweeney, 2008, 486).

The Indivisible Self model represents a framework that can be used to describe the somewhat elusive concept of self-care that the WHO established as the foundation for positive mental health. Not only does the model break down the concept of self-care into specific factors that encompass the whole of human experience, but it brings the focus of attention to strengths an individual, and arguably, family and community system possesses, as opposed to a sole focus on illness and psychopathology. Familiarity with the Indivisible Self model could provide healthcare workers in Ethiopia with a framework to assess mental health issues presenting in their clients, and a direction for providing culturally responsive interventions. Following are some suggestions about how orientation to the Wellness and Indivisible Self models could facilitate services provided to children in Ethiopia.

On-The-Job Training for School-Based Professionals

A significant percentage of children and adolescents spend majority of their daytime in schools. For instance, the Ethiopian Ministry of Education stated that the Net Enrollment Ratio (NER) for primary school children (7–14 years-olds) was 94.7% (Federal Ministry of Education, 2019: 24 and 41). This data presents a relevant fact that mental health services involving children and adolescents can be addressed in school settings in addition to formal mental health facilities. Desta et al. (2017: 34) looked at the possibility of integrating mental health interventions, mainly the screening of mental health disorders in the early childhood care services, as a means to provide access to children. The study found that early childhood care and education teachers benefited from trainings on early identification of mental disorders. The authors suggested that schools can support the formal health system stranded by a lack of mental health professionals by identifying cases early and providing care and support. Using the Indivisible Self model (Myers and Sweeney, 2004, 237; Myers and Sweeney, 2008, 484) as a reference in considering what sources of care and support a child might need, school personnel can assess what strengths a child and family already possess—in what areas a child is doing well, and what areas could use more attention. From a wellness, strengths-based perspective, building upon strengths can often alleviate challenges presenting in other areas. Perhaps a child has unrecognized strengths that they can apply to specific problems they are facing, or assistance can be provided to families/communities in managing symptoms that are presenting as problematic. While knowledge in diagnosing mental disorders is an important aspect of the formal training of mental health professionals, it does not always equate to culturally responsive interventions. Perhaps orienting mental health workers and other human services personnel to the Indivisible Self model could allow for culturally responsive intervention without the need for diagnostic assessment, especially when human service professionals are not adequately trained to do so.

Adoption of Child/Adolescent Specific Mental Health Initiatives

Despite the high prevalence of mental health problems among children in Ethiopia, the FMOH does not have a specific plan or strategy to address mental health issues in children and/or adolescents (World Health Organization, 2017a: 1). Considering the developmental milestones children and adolescents go through as they transition to the next stages of their lives, mental health services should be specifically designed to address their needs. The establishment of developmental milestone-specific mental health strategies would allow the country to develop initiatives and action plans to build a system for children/adolescents to achieve overall wellness. Developing a national strategy would open a platform for training of professionals in child/adolescent specific mental health issues and/or general mental health trainings. The Indivisible Self model could bridge the gap between traditional university training in diagnosis and assessment of mental disorders, the WHO's pyramid model of mental health, and the Ethiopian cultural orientation toward spiritual connection.

The development of a national strategy would also allow collaboration with mental health professionals, although few, that are already working with children and adolescents in schools. These professionals include applied psychology, school psychology, and social psychology graduates to be counted as mental health service providers. Furthermore, it would allow schools to adopt the strategy and design accountable action plans to promote the overall wellness of their students.

DISCUSSION

The design of mental health professionals' training curricula should be culturally sensitive to enable trainees to translate their training into practice. It is imperative that international frameworks for assessment, diagnosis and intervention are implemented in accordance with the local contexts of Ethiopian culture. For instance, although using the *DSM-5* as a reference to diagnose mental disorders is valuable, it is paramount that professionals learn about the cultural considerations for each diagnosis. In this regard, Wondie and Abawa's (2019: 11) study among mental health professionals in Ethiopia found that the conceptualization and intervention of mental health disorders is perceived differently than in Western cultures mostly because of cultural factors. In addition, the translation of mental disorder symptoms in a local language without a guiding document poses a challenge for mental health professionals. Therefore, trainees need to be equipped with the knowledge and the skill in identifying culturally specific symptoms that are presenting as problematic to the person in need. Familiarity with the Indivisible Self model could enable professionals to design intervention strategies that go hand-in-hand with the values of the person they are helping; acknowledging their strengths and challenges.

Introducing a relationship-based wellness model as opposed to the diagnosis-focused medical model would alleviate some of the

concerns raised above. Ethiopians believe in establishing and maintaining close relationships with each other. Most people have shared values and consistently work hard to maintain the equilibrium of this status quo. Based on the recommendations of the WHO pyramid model's mix of mental health services framework, professional helpers should recognize individuals' self-care strategies that are derived from their values and preferences. Further, they should design interventions that integrate the informal community in to their mental health recovery.

Effective integration of the Indivisible Self model to the education and training of mental health professionals can be done in multiple phases. First, continuing education or in-service programs could provide information about overall wellness and the Indivisible Self model to professionals providing services to children and families who were not specifically trained in mental health. Integrating basic knowledge about holistic wellness, recognizing strengths, and enlisting support from families and communities could help to alleviate symptoms that children present. Second, the curriculum design of university programs could be tailored toward promoting the self-care of the individual seeking mental health services. Integrating topics, courses, and experiential learning tasks to the curriculum could enable mental health professionals in training to coordinate the formal and informal systems, self-care, and professional mental health services that their future clients require. These strategies could enable both professionals and the immediate community members to accept the individual with mental health issues as a person first and not as a diagnosis. Third, working with schools, neighborhoods and parents could be an effective strategy to work toward comprehensive mental health services that integrate informal and formal sectors. Developing a system of accountability in schools would also encourage the school system to establish and/or strengthen the mental health systems within schools. Finally, establishing a mentoring and supervision system could provide an opportunity for mental health workers to consult on culturally specific challenges in the process of assessment, diagnosis and intervention for mental disorders among children and adolescents. This mentoring and supervision platform could create an opportunity for integrating and developing culturally responsive strength-based strategies that are supported by the lived experiences of Ethiopian children and adolescents.

CONCLUSION

The potential implementation of the above proposed interventions could enhance the access and quality of mental health services for Ethiopians, especially children and adolescents. Introducing a system that acknowledges the relevance of continuing education will help mental health professionals to be familiar with adaptable contemporary mental health interventions. Consultation among professionals is key to generating ideas that could solve challenges experienced by mental health professionals. It creates the opportunity for psychologists, social workers, and counselors to work across disciplines which might lead to collaborative evidence-based research focusing on culturally sensitive mental health interventions. This systematic review also brings to light the need for ongoing research on the implementation and outcome of the Indivisible Self model specifically within an Ethiopian context. College level mental health programs could pilot introducing the concept and implementation of the wellness approach with the goal of integrating culturally sensitive concepts and interventions into the overall approach to mental health care. On the bases of its applicability, future policies and strategies could integrate the Indivisible Self model in to the WHO's pyramid model of optimal mix of mental health services.

Improving access to culturally relevant intervention strategies to better serve children and adolescents in Ethiopia is at the heart of our purpose in this paper. Systemic change takes time, and perhaps the best place to start is to acknowledge the need for an inclusive and culturally responsive approach to mental health care. Acknowledgment could lead to continuing education for direct care (health extension) workers, followed by improved collaboration between health extension workers and mental health professionals. If preliminary outcome data support the inclusion of a wellness approach to mental health care with children and families, perhaps that will provide the impetus for including curricula and practice implementing the wellness approach and the Indivisible Self model into higher education training programs. Promoting the holistic health and wellness of children and adolescents in Ethiopia, and around the world, facilitates wellness in families, communities, and larger social contexts. The world is calling for change, and perhaps honoring cultural contexts in our approach to mental health care is but one way to answer the call.

AUTHOR CONTRIBUTIONS

HM is the lead author for this manuscript. HM and VJ consulted on organization and outline and divided tasks. HM conducted literature review on mental health approaches and services in Ethiopia. VJ provided context on the wellness and indivisible self models. Authors worked together to edit and integrate contents in the manuscript.

REFERENCES

Abera, M., Robbins, J. M., and Tesfaye, M. (2015). Parents' perception of child and adolescent mental health problems and their choice of treatment option in southwest Ethiopia. *Child Adolesc. Psychiatr. Ment. Health* 9, 40. doi:10.1186/s13034-015-0072-5

Adler, A. (1927). *Understanding human nature*. New York, NY: Fawcett.

Ahmed, E., Hailu, M., and Fessehaye, A. (2019). Knowledge, attitude, and practice towards mental illness service provision and associated factors among health extension professionals in Addis Ababa, Ethiopia. *Int. J. Ment. Health Syst.* 13 (5), 1–9. doi:10.1186/s13033-019-0261-3

American Psychological Association (2013). *Diagnostic and statistical manual of mental disorders*. 5th Edn. Arlington: American Psychological Association.

Assefa, Y., Assefa Gelaw, Y., Hill, P. S., Taye, B. W., and Damme, W. V. (2019). Community health extension program of Ethiopia, 2003–2018: successes and challenges toward universal coverage for primary healthcare services. *Global Health* 15 (1), 24. doi:10.1186/s12992-019-0470-1

Chisholm, D., Garman, E., Breuer, E., Fekadu, A., Hanlon, C., Jordans, M., et al. (2020). Health service costs and their association with functional impairment among adults receiving integrated mental health care in five low- and middle-income countries: the PRIME cohort study. *Health Policy Plan.* 35 (5), 567–576. doi:10.1093/heapol/czz182

Desta, M., Deyessa, N., Fish, I., Maxwell, B., Zerihun, T., Levine, S., et al. (2017). Empowering preschool teachers to identify mental health problems: a task-sharing intervention in Ethiopia. *Mind Brain Educ.* 11 (1), 32–42. doi:10.1111/mbe.12135

Faregh, N., Lencucha, R., Ventevogel, P., Dubale, B. W., and Kirmayer, L. J. (2019). Considering culture, context and community in mhGAP implementation and training: challenges and recommendations from the field. *Int. J. Ment. Health Syst.* 13, 58. doi:10.1186/s13033-019-0312-9

Federal Ministry of Education (2019). *Education statistics annual abstract 2011 E.C. (2018/19)*. Addis Ababa: Federal Ministry of Education. Available at: https://ESAA.

Federal Ministry of Health (2012). *National mental health strategy (2012/13—2015/16)*. Addis Ababa, Ethiopia: Johns Hopkins University/TSEHAI.

Federal Ministry of Ethiopia (2019). National mental health situation. Power point presentation on the 'mental health and NCD' forum. Available at: http://www.moh.gov.et/ejcc/am/node/170.

Ghebrehiwet, S., Baul, T., Restivo, J. L., Shibre Kelkile, T., Stevenson, A., Gelaye, B., et al. (2019). Gender-specific experiences of serious mental illness in rural Ethiopia: a qualitative study. *Glob. Public Health.* 15 (2), 185–199. doi:10.1080/17441692.2019.1680723

Hambisa, M. T., Wolteji, A. D., and Abdeta, T. (2020). Depressive symptoms among haramaya university students in Ethiopia: a cross-sectional study. *Depress Res. Treat.* 2020 (3), 1–9. doi:10.1155/2020/5027918

Hanlon, C., Eshetu, T., Alemayehu, D., Fekadu, A., Semrau, M., Graham, T., et al. (2017). Health system governance to support scale up of mental health care in Ethiopia: a qualitative study. *Int. J. Ment. Health Syst.* 11 (38), 1–16. doi:10.1186/s13033-017-0144-4

Kebede, W. (2019). Social work education in Ethiopia: past, present and future. *Int. J. Soc. Work.* 6 (1), 1–17. doi:10.5296/ijsw.v6i1.14175

Kerebih, H., Abrha, H., Frank, R., and Abera, M. (2018). Perception of primary school teachers to school children's mental health problems in Southwest Ethiopia. *Int. J. Adolesc. Med. Health.* 30 (1), 1–14. doi:10.1515/ijamh-2016-0089

Moher, D., Liberati, A., Tetzlaff, J., and Altman, D. (2009). The PRISMA Group.Preferred reporting items for systematic reviews and meta-analyses the PRISMA statement. *PLoS Med.* 6 (7), 1–6. doi:10.1371/journal.pmed1000097

Mosak, H. H., and Dreikurs, R. (1967). The life tasks: III. the fifth life task. Individual Psychologist, 5 (1), 16–22. Available at: https://search-proquest-com.weblib.lib.umt.edu:2443/scholarly-journals/life-tasks-iii-fifth-task/docview/615511629/se-2?accountid=14593.

Myers, J. E., and Sweeney, T. J. (2004). The indivisible self: an evidence-based model of wellness. *J. Indiv. Psychol.* 60 (3), 234–245.

Myers, J. E., and Sweeney, T. J. (2008). Wellness counseling: the evidence base for practice. *J. Counsel. Dev.* 86 (4), 482–493. doi:10.1002/j.1556-6678.2008.tb00536.x

Sixty-Sixth World Health Assembly (2013). Comprehensive mental health action plan 2013–2020, WHA66.8, Agenda item 13.3. Available at: https://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_R8-en.pdf?ua=1.

Witmer, M. J., Sweeney, T. J., and Myers, J. E. (1998). *The wheel of wellness*. Author: Greensboro, NC.

Wondie, Y. (2014). Reflections on the development of psychology in Ethiopia and future directions. *Int. Rev. Psychiatr.* 26 (5), 585–588. doi:10.3109/09540261.2014.917611

Wondie, Y., and Abawa, M. (2019). Westernization versus indigenization in the context of global mental health: training and services in Ethiopia—University of Gondar in focus. *Int. J. Ment. Health* 49 (4), 257–271. doi:10.1080/00207411.2019.1644139

World Health Organization (2003a). Caring for children and adolescents with mental disorders: setting WHO directions. Geneva: World Health Organization. Available at: https://apps.who.int/iris/handle/10665/42679.

World Health Organization (2003b). Organization of services for mental health: mental health policy and service guidance package. Geneva: WHO Press. Available at: https://www.who.int/mental_health/policy/services/4_organisation%20services_WEB_07.pdf?ua=1.

World Health Organization (2009). Improving health systems and services for mental health. Geneva: WHO Press. Available at: https://apps.who.int/iris/bitstream/handle/10665/44219/9789241598774_eng.pdf?sequence=1.

World Health Organization (2016). International statistical classification of diseases and related health problems 10th revision.5th Edn. Geneva: World Health Organization. Available at: https://www.who.int/classifications/icd/en/.

World Health Organization (2016a). Introduction to the training of trainers and supervisors training manual: mhGAP training of trainers and supervisors (ToTS) training manual. Italy: World Health Organization. Available at: https://www.who.int/mental_health/mhgap/tots_manual.pdf?ua=1.

World Health Organization (2016b). mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings. Version 2.0. Italy: World Health Organization. Available at: https://www.who.int/publications-detail/mhgap-intervention-guide—version-2.0.

World Health Organization (2017a). Mental health ATLAS 2017 Ethiopia country profile. Geneva: World Health Organization. . Available at: https://www.who.int/mental_health/evidence/atlas/profiles-2017/ETH.pdf?ua=1.

World Health Organization (2017b). Mental health. Geneva: World Health Organization. Available at: https://www.who.int/health-topics/mental-health#tab=tab_2.

World Health Organization (2019). Suicide in the world: global health estimates. Geneva: World Health Organization. Available at: https://www.who.int/publications-detail/suicide-in-the-world.

Zeleke, W. A., Nichols, L. M., and Wondie, Y. (2019). Mental health in Ethiopia: an exploratory study of counseling alignment with culture. *Int. J. Adv. Counsell.* 41, 214–229. doi:10.1007/s10447-018-9368-5

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Psychiatry

ORIGINAL RESEARCH
published: 23 February 2021
doi: 10.3389/fpsyt.2020.583674

Assessing the Effectiveness of Professional Development Training on Autism and Culturally Responsive Practice for Educators and Practitioners in Ethiopia

Waganesh A. Zeleke[1]*, *Tammy L. Hughes*[1] and *Gibbs Kanyongo*[2]

[1] Department of Counseling, Psychology and Special Education, Duquesne University, Pittsburgh, PA, United States,
[2] Department of Educational Foundations and Leadership, Duquesne University, Pittsburgh, PA, United States

This study examines the effect of professional development training on educators' and practitioners' knowledge of Autism and the use of culturally responsive practices. Using a single group, pre-post design, data was gathered from 34 educators and health professionals (i.e., teachers, counselors, psychologists, therapists, therapeutic care workers, social workers, and nurses) in Ethiopia. A week-long training covering ASDs and culturally responsive evidence-based training was provided to participants. Results showed significant improvement in participants' knowledge about ASD symptoms, nature, characteristics, as well as intervention selection. Participants' use of culturally informed approaches, in their area of professional service, showed a high level of participants' knowledge and low-level use of culturally responsive practices, policies, and procedures. Recommendations for addressing cultural factors impacting the diagnosis and treatment-seeking approaches to ASD in Africa are provided.

Keywords: Ethiopia, professional development training, multicultural mental health practice, training effectiveness, autism

OPEN ACCESS

Edited by:
Wulf Rössler,
Charité – Universitätsmedizin Berlin, Germany

Reviewed by:
Kerim M. Munir,
Boston Children's Hospital, United States
Tirussew Teferra Kidanemariam,
Addis Ababa University, Ethiopia

***Correspondence:**
Waganesh A. Zeleke
zelekew@duq.edu

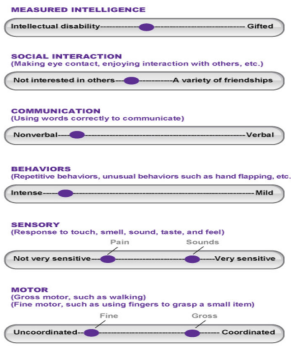
Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Psychiatry

Received: *15 July 2020*
Accepted: *10 December 2020*
Published: *23 February 2021*

Citation:
Zeleke WA, Hughes TL and Kanyongo G (2021) Assessing the Effectiveness of Professional Development Training on Autism and Culturally Responsive Practice for Educators and Practitioners in Ethiopia. Front. Psychiatry 11:583674. doi: 10.3389/fpsyt.2020.583674

INTRODUCTION

Autism spectrum disorder (ASD) is a developmental and neurological disorder characterized by social and communication deficits as well as restricted, repetitive behavior patterns. Although autism is viewed as a set of criteria, individuals on the spectrum show a range of overactive sensitivities as well as under responsive characteristics. For example, consider this illustration adopted from Johnson (1) and reprinted with permission.



May be between intellectually disabled–gifted.

May have no interest in others or interest in a variety of friendships.

May be non-verbal or verbal.

May show obvious and intense behaviors or repetition may be mild.

May be insensitive overly sensitive to sound, smells, pain, etc.

May be uncoordinated or coordinated.

The Centers for Disease Control in the USA indicates that ASD affects one in 59 children (2). Globally, one out of every 160 children is diagnosed with ASD (3). Even though the prevalence of ASD is harder to determine in low- and middle-income countries, there are some researchers that have documented that the prevalence of autism is growing (4–7).

Many of the challenges in documenting ASD in developing countries are in the different presentations of symptoms as well as how typical symptoms are interpreted. For example, a common sensory sensitivity to shirt tags in clothes worn by US children may have no comparison to African children's clothing where no tag is present. Or that there is only one shirt to wear does not provide the child the option of preferred shirt selection. Likewise, limited food options may account for the limited food sensitivities. In another example, hand flapping may be interpreted as a possession by a spirit in the African context. Given that the majority of knowledge generated about ASD comes from high-income countries, such as the United States (8), there is a need to better understand cultural differences in the identification of ASD so as to develop effective screening and treatment procedures that are relevant and palatable to different parts of the world (9).

In most of the African context, public education about ASD is low. The healthcare approach relies on traditional healing methods involving physiological, spiritual, cosmological, ecological, and social forces that are informed by local customs. Research shows that a lack of public education increases the risk of misinformation about the presence of ASD. Furthermore, there is a gap in the knowledge of professionals responsible for diagnostic procedures and management of ASD in Africa. Researchers routinely indicate methodological weakness in studies using African participants as well as a lack of culturally relevant phenotyping tools (8, 10–12). A more global orientation to ASD is needed to transfer the knowledge to professionals in different regions and cultures. In sub-Saharan Africa, children with ASD are diagnosed later than children in the USA, where those from impoverished regions are most impacted due to lack of awareness, stigma, and lack of professionals (4, 7). Creating awareness and training educators and healthcare workers about ASD is a pressing need for the region (6, 13, 14).

ETHIOPIAN CONTEXT

Ethiopia is sub-Saharan Africa's oldest nation with a 3,000-year history and an estimated population of 101 million. The country is home to diverse cultures, where 80 languages are spoken. Eighty-five percent of the population lives in rural areas where access to health care and public health education is limited or there is none at all. In Ethiopian society, health is generally viewed in a traditional light, meaning that a healthy person is thought to be in a state of equilibrium among the physiological, spiritual, cosmological, ecological, and social forces (15). Knowledge about ASD in Ethiopia is relatively low across the general public, education and social sectors, and health and government officials (8, 16, 17). Without much structure, there is little awareness or mobilization of the nation's efforts to promote autism and other disabilities through intervention programs among its citizens.

Ethiopian healthcare professionals are some of the key individuals who may detect ASD, so they are an integral part of early identification and treatment. Similar to other least developed nations, however, these professionals are also still in the initial steps of understanding autism and its treatments (18). Steeped in culture, these Ethiopian providers have not yet sorted cultural assumptions from professional practices. Research in sub-Sharan countries shows that knowledge and awareness of ASD is inadequate and there is a need for education of healthcare workers to help raise the public's levels of awareness. For example, Bakare et al. (13) found that a little more than half of the participants believed that natural causes (e.g., wind, rain, etc.) could explain ASD, and this group of individuals was most likely to recommend orthodox aid (e.g., voyage to a spiritual healer) as the method to help families relieve ASD symptoms in their children. It was also found that healthcare workers tend to recognize ASD symptomatology as a result of natural causes. Of the total healthcare workers in this study, 55% believed that ASD is treatable, and 32% believed ASD to be preventable (they subscribed to intrauterine infection or supernatural forces from past sins as controllable causes). Notably, it was also found that those involved in the management of children with ASD were more likely to believe that autism is treatable and manageable.

Changing the beliefs that some healthcare workers hold about ASD could potentially foster positive help-seeking behaviors of families. To that end, specialized training, informed by science and culturally sensitive information, is needed for healthcare workers in Africa to address ASD (7, 13, 17). However, many barriers are evident. First, it is important to note that half of the population of Ethiopia is children. This is due to the nation's high birth rate [43 births/1,000 people; (19, 20)]. Second, the most common diseases children suffer from in Ethiopia are measles and malaria, diarrhea, dehydration, pneumonia, otitis media, intestinal parasites, and skin infections (19, 21). The majority of the nation's health budget is allocated to treat these infectious communicable diseases with only 2% of the budget allocated for mental health services, even though 12% of the nation's population suffers from mental illness (22, 23). Third, beyond the sources mentioned, access to mental health services above is scarce, expensive, and improbable given the remote, sometimes inaccessible, locations where families reside. Yet, this lack of access to services is likely to result in the mistreatment of children ranging from inadequate care to being rejected by regular public schools outright; because special education services are available only in a few special schools, few children have access to these services (6, 7, 24).

Addressing mental illness and developmental disabilities, such as autism, from a scientific vantage point is only a recent development in Ethiopia. Recently, there has been a promising rise in mental health awareness and an effort in promoting the educator's and health professional's knowledge in autism in particular (6, 17, 25). New efforts include attempts to integrate mental health in the primary healthcare system and graduate-level training in several universities and across the areas of psychology, social work, and psychiatry (26). However, the

limited number of trained helping professionals continues to leave the country as ill-equipped and ill-prepared to provide culturally responsive and evidence-based treatment to large segments of individuals on the spectrum. The problem of a lack of mental health training programs is underscored by the population calling for and needing services, "In [the] predominantly rural area of Ethiopia alone, mental illness comprises 11% of the total burden of diseases, with schizophrenia and depression constituting the top ten of most burdensome conditions, out-ranking HIV/AIDS" [(27), p. 9].

In general, the development of university professional practice programs in the helping professions within the higher education system is still very minimal (17). Not only is education and training lacking, but also university faculty researchers have not yet taken up these efforts for measurement or their service to the community. Considering the country's socioeconomic circumstance, cultural factors (e.g., collectivism practice), and the attitudes toward mental illness, the university community should be an essential resource for leading the development of mental health care for the public good in Ethiopia (17). Taken altogether, it is clear that a commitment to high-quality and sustained professional development training for existing helping professionals (e.g., counselors, psychologists, social workers) in all systems (e.g., government, community, individual) is the required framework to enhance scientific base knowledge and culturally responsive practice in Ethiopia.

AUTISM SPECTRUM DISORDERS: NATURE AND TREATMENT

In the United States, the dominant discourse surrounding the causes of ASD includes the role of genetics (genetics in response to environmental input) and necessarily excludes spiritual explanations. Much research has supported the presence of a genetic component to the complex etiology of autism, though the extent to which genes influence the development of ASD varies in the literature (14, 28–31). As far back as the 1980s, a study suggested that mental health professionals in the United States often attribute infantile autism to genetics, even more so than European mental health professionals (32). In the same vein, a recent study investigating the beliefs of the general public and childcare providers about ASD found that participants believed autism to manifest from neurological and genetic causes (33). These researchers also found that many individuals get their information about ASD from the mass media, and while most participants relayed an accurate understanding of autism, 5% noted diet and 10% noted vaccinations as the causes of autism, which is concerning given that these causes have been completely debunked (33). In considering environmental factors, it is not being argued here that the environment at home causes autism; instead, we showcase how altering dynamics in the home environment may lead to some improvements in behavior (34, 35). In short, the dichotomy between genetic or environment contribution (e.g., nature vs. nurture) regarding the *cause* of disorder as compared to an interactionist perspective regarding the *treatment* of the disorder needs to be distinguished (36, 37). This clarification may allow for a more in-depth understanding of ASD, which hopefully can lead to more support from the family unit toward functioning as harmoniously as possible.

Treatment in Africa

It is worth re-emphasizing that the diversity of the cultures in Africa contributes to different conceptualizations about the cause and treatment for ASD in children (38). The various conceptualizations of symptoms require a culturally sensitive diagnostic procedure and treatment protocol. Clinicians are required a nuanced understanding of the parents' experiences and cultural beliefs so as to be able to attend to the presence of symptoms even when these are presented in a manner that may differ from the dominant descriptions of ASD in the US literature. For example, symptoms of ASD such as self-stimulating behaviors or rigid adherence to routines may be characterized as evidence of being possessed by parents. Rituals may be repetitive stereotypic or understandable acts used to ward off possessions (e.g., touching a stick blessed by a healer planted outside the door). Skilled clinicians need to be able to identify symptoms and not dismiss concerns as irrelevant.

A US evaluation process may be unfamiliar and unsuccessful. For instance, de Vries (8) summarizes Berg (10) and points out that filling out a "yes or no" questionnaire about a child may be a foreign concept to many families in Africa, as an oral, or story-telling, tradition would be more culturally appropriate. Similarly, African children regularly wait 18 months for a basic diagnostic assessment, and there is a notable delay between the parents' first concerns and diagnosis (8, 39, 40). Therefore, long delays before seeking services may not be particularly concerning for parents. When parents do seek help, the majority of parents were seeking a "cure" for their child's condition (41). This is important to note because there is currently no cure for ASD, but managing symptoms and building life skills can be helpful.

Once a challenge is identified, there are limited services in Africa that can provide psycho-education and referral to specialized schools (8). Given this lack of access to trained professionals, it is typical for parents or caregivers to provide interventions for ASD management (8). As such, a multidisciplinary approach to treating ASD is uncommon and not concerning to African parents of children with special needs or developmental disorders (13). Without a firm understanding of the processes of treatment (e.g., modeling, re-enforcement, and practice), one parent wondered why they needed to attend so often when "they just do the same thing every day we come, it's never different." This reality has led researchers to assert that "no African countries have policies or good practice guidelines for assessment, treatment, education, and adult support of individuals with ASD" [(8), p. 131; (42)].

One of the cornerstones of mental health treatment in Africa involves consulting traditional healers, which differs from the Western understanding of treatment or management of psychological health concerns and developmental conditions. Depending on the cultural context, individuals involved, and geographical location, treatments can vary from traditional (e.g., prayers) to more modern (e.g., including going to hospitals) and include combinations of each type of treatment (41). For

example, Gona et al. (41) found that the community was beginning to view ASD as a disorder that could have cultural and medical implications, which highlights not only the need for cultural competency when working to understand treatments for ASD in Africa but also not to discount the fact that some people do value and seek out more modern treatment.

THE CURRENT STUDY

The purpose of this study is to measure the effectiveness of an ASD training provided to helping professionals in Ethiopia. The training occurred as part of a 5-day workshop concerning cultural competencies in the diagnosis and treatment of anxiety, depression, posttraumatic stress disorder, schizophrenia, and ASD. In this manuscript, we address the following research questions:

1. Do educators and practitioners in Ethiopia improve their ability to (a) detect, (b) assess, and (c) plan interventions for individuals with ASDs?
2. How can helping professionals improve multicultural competencies (e.g., knowledge of community culture, personal involvement, resource and linkages, and organizational policy and procedure) to provide mental health service to individuals with different backgrounds?

METHODS

This pre–post method was guided by a quantitative approach to examine the effectiveness of professional development training on helping professionals attain autism intervention competency (e.g., awareness and knowledge).

Participants

The sample ($n = 34$) consisted of educational and health providers (e.g., special education teachers, counselors, psychologists, therapists, psychiatric nurses) in Ethiopia who attended a 5-day training on mental health disorders. All have already met the requirements to practice in their areas of discipline. None were exposed to US training competencies during their original course of studies.

The training took place at the request of the host university in Ethiopia. The Office of Quality Assurance and Audit Directorate at the University of Gondar notified the trainees about the study and invited volunteers to participate. Trainees who did not wish to participate in data collection were unknown to the researchers and were not excluded from the training. Study participation was voluntary. At the start of the in-person training, the professionals were asked to sign a consent form to engage in the training and assessment process if they wish. Out of 39 participants who attended the training, 34 of them voluntarily participated in this study.

All but one of the participants reside in an urban area of Ethiopia. Twenty-three of the participants identified themselves as male, and 11 as female. Twenty-four identified their ethnic group as Amhara, whereas four listed Oromo, one Tigray, and five contained no information. Ages ranged from 23 to 39 years old. None of the participants disclosed physical disabilities. Fourteen participants hold degrees in psychology, five in nursing, seven in social work, and eight in counseling and other educational fields. Eleven individuals listed "other" as their type of degree. One-third of the individuals' highest level of education was a bachelor's degree, and two-thirds had a master's degree. The amount of time in their current positions ranged from less than one full year to 11 years in mental health service provision. The predominant occupations of individuals participating in the training were counselors, social workers, nurses, and lecturers, each making up about 20% of the sample. Other professions include psychotherapists, teachers, and special educators.

Regarding the participants' mental health training, 21 participants disclosed no previous training in ASDs. Conversely, eight reported having experience working with clients diagnosed with ASDs.

The training was offered during summer for 5 days for 8 h each day. At the beginning of the training, the outline of the training curriculum was distributed and reviewed with the participants.

THE NATURE OF AUTISM TRAINING

The organization of the training was based on culturally responsive contemplative pedagogy and a comprehensive autism training model that includes both didactic presentation and experiential and group learning projects. A culturally responsive contemplative pedagogy is an approach that utilizes the participants' culture and regional experience in conceptualizing the Westernized definition of symptoms and intervention. For example, the participants provided case examples from their lived experience, and a comparison was made to the criteria and interpretation of the criteria based on DSM-V. The training was designed to be delivered through forethought, performance, and self-reflection. At the beginning of the training, trainees had been engaged in classroom activity and discussion that monitor their level of motivation and explore their fear and expectation to take the training. During the training, participants were engaged in experiential learning that involves role playing, case demonstrations, and case analysis. Efforts were made to utilize culturally and contextually relevant cases and demonstration. At the end of the training, participants were engaged in self-reflection of their learning process.

The overall goal of the training was to enhance participants' understanding of ASDs. Topics range from characteristics of individuals with ASDs, history of ASDs and various theories of autism, systems and institutions involved in the diagnosis, treatment, case management of children with ASDs, and use of functional behavior assessment for program planning, as well as identifying evidence-based culturally responsive treatment methods for individuals with ASDs.

Instrumentation

This study was a single-group, pre–posttest design. The following instruments are used to collect data: (a) self-created pre- and posttraining ASD knowledge assessment test, (b) the Cultural Competence Self-Assessment Questionnaire (CCSAQ), and (c) demographic information including age, gender, residential

area, ethnicity, job, educational background, and training and professional experiences. A summary is presented below.

The *ASD knowledge assessment test* was constructed with 15 items that test the participants' knowledge about symptoms of ASDs, diagnostic information, history of the disorder, cause and prevalence, intervention, and treatment. A higher score of the test indicates the trainees' full understanding of the disorder. The test was administrated before and after the trainees received the training. The total score on the ASD knowledge assessment test measures the knowledge of symptoms, identification, nature/expression of impairments, cause, and interventions.

The *CCSAQ* is a standardized assessment tool developed by the Portland Research and Training Center in 1995 (43). The CCSAQ is based on the Child and Adolescent Service System Program's cultural competence model (44), which describes competency in terms of four dimensions: attitude, practice, policy, and structure. The CCSAQ has proven useful in various organizations around the USA. We used the CCSAQ service provider version with minor modification to fit into the Ethiopian context. For example, Ethiopia is a multiethnic country, which means a person with a specific ethnic group could be a minority in one region, but could be part of the majority group in another region. Hence, we utilize a contextual definition of individuals with minority backgrounds instead of the word community of color. The CCSAQ is a 56-question self-report with four subscales: community knowledge, personal involvement, resource and linkage, and policy and procedures. The CCSAQ uses a four-point Likert scale with responses ranging from "not at all" to "very well." The CCSAQ subscales have yielded alpha coefficients ranging from 0.60 to 0.80.

Data Collection Procedure

Once consent was obtained, all participants completed a demographics questionnaire and the Cultural Competence Self-Assessment Questionnaire. All participants then attended a 5-day workshop on the assessment practices and interventions for depression, anxiety, schizophrenia, posttraumatic disorder, and ASD. The ASD portion of the training was covered over the course of 2 days. Before the first lesson of each disorder, the participants completed a pretest of their knowledge on that specific disorder. Then, the researchers provided education for the participants on the symptoms and evidence-based interventions associated with ASDs and the cultural responsiveness and competency approach for assessment and intervention.

The training was conducted mostly in English, as the university is designated as an English-medium location, meaning classes are to be taught in English. However, Amharic was also used during the role-play activities and at times to allow attendees to express themselves best through a more familiar and fluent language. The lead author spoke Amharic as her native language and was present during the training. At the end of the training, the participants took a posttest to measure their knowledge of ASDs. The pre- and posttests were the same test administered at two separate times to measure learning.

Ethical Considerations

A US university's IRB committee approved the study. The nature and scope of the research were explained to each participant before the training. Trainees who are voluntary participants complete the demographics survey and the questionnaires for the study. Participants were informed that their participation is optional, and each of them was assured that there would be no retribution for the study's withdrawal at any time. All participants had the opportunity to ask questions before the survey and before the pre-training test was administered. They were also advised that any information provided would remain confidential.

Data Analysis and Results

Once data were collected, these were entered into SPSS 23. In cases where it made a conceptual sense, data were prescreened to identify any outliers and missing data and to collapse the response categories of the independent variables with a smaller size. For example, in the original data, for the variable field of study, the types "counseling" and "education and other related" were combined into one category "counseling, education and other related."

The study's main independent variables are the demographic variables presented in **Table 1**, which are gender and field of studies. The dependent variables are the level of ASD knowledge measured by the pre- and post-training tests and cultural competency measured by the CCSAQ. Inferential statistics were used to examine the effectiveness of the professional development training in participants' knowledge of ASD. The aggregated CCSAQ scores' means are computed for each item and each subscale.

TABLE 1 | Sample demographics.

		N	%
Sex of the respondent	Male	23	68
	Female	11	32
Ethnicity	Amhara	24	70
	Oromo	4	12
	Tigray	1	3
	Not-identified	5	15
Age range	21–30	20	60
	31–40	14	40
Education	Bachelors	10	29
	Masters	23	68
	Post Masters	1	3
Field of Study	Psychology	14	40
	Social work	7	21
	Psychiatric nursing	5	15
	Counseling/other	8	24
Residentials area	Urban	33	97
	Rural	1	3
Previous training on ASDs	Yes	5	15
	No	29	85

Participants' Understanding of Autism Spectrum Disorders

To determine the effectiveness of the training on participants' understanding of ASD, the pretest and posttest comparisons were made using paired sample *t*-tests that were conducted to compare participants' responses in four domains: symptoms, nature, cause, and interventions (see **Table 2**).

Results showed significant improvements in learning. Specifically, there were significant gains in understanding symptoms when comparing pretest ($M = 2.2$, SD $= 1$) and posttest ($M = 4.6$, SD $= 0.78$) results: $t_{(32)} = -11.10$ ($p < 0.01$); understanding of the nature of ASDs (i.e., history, prevalence, and characteristics) before ($M = 2.0$, SD $= 1.15$) and after the training ($M = 4.7$, SD $= 0.49$): $t_{(32)} = -9.46$ ($p < 0.01$); understanding the cause and associated factors of ASDs before ($M = 0.87$, SD $= 0.63$) and after the test ($M = 1.8$, SD $= 0.42$; $t_{(32)} = -6.6$ ($p < 0.01$); and preparedness to use evidence-based intervention and treatment when comparing before ($M = 1.36$, SD $= 0.82$) and after ($M = 2.6$, SD $= 0.53$); $t_{(32)} = -7.4$ ($p < 0.01$) training scores. A multivariate analysis by group (age, gender, field of study, and experience) showed (see **Figure 1**) that there was a significant change in all four variables from pretest to posttest, which means participants' understanding about ASD is increased as a result of the in-service training.

TABLE 2 | Pre-post comparisons.

Domain	Pre-training result $N = 34$		Post-training result $N = 34$		*t*-test
	M	SD	M	SD	
Symptoms	2.21	1.08	4.60	0.78	11.1*
Nature	2.09	1.15	4.63	0.4	9.459*
Cause	0.869	0.6255	1.78	0.42	6.552*
Intervention/Treatment	1.36	0.82	2.60	0.53	7.4*

*$p < 0.01$.

Assessment of Culturally Informed Services and Practices Among Participants

Using a Likert-type scale (i.e., from 1 = not at all, to 4 = very often), participants responded to how accurately the statement described their cultural responsiveness in four subscale areas that includes knowledge of the community, personal involvement, resources and linkage, and organizational policies and procedures.

The subscale *participants' knowledge of the minority communities* they serve is described in **Figure 2**. The aggregated mean shows that participants scored above average for eight of the 14 items. These include knowing which *languages are used by the minority groups* in your communities ($M = 3.02$, SD $= 1.02$), being able *to describe the minority group* in your service area ($M = 2.79$, SD $= 0.94$), identification of *within-group differences* ($M = 2.69$, SD $= 0.98$), information about the *social problems* of the minority groups within your service area ($M = 2.89$, SD $= 0.88$), identifying minority group (i.e., social historian, formal service agencies, formal and informal leaders, advocates, clergy or spiritualists) ($M = 2.7$, SD $= 1.09$), awareness of *conflicts*

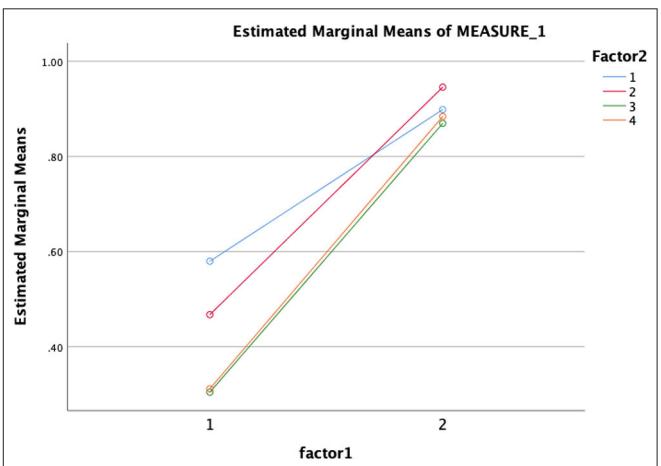


FIGURE 1 | Multivariate tests.

TABLE 3 | Participants' response on multicultural resources and use of linkages.

	N	M	SD
Does your agency have linkages with institutions of higher education (e.g., colleges, universities, or professional schools) that could provide you with accurate information concerning different cultural group?	34	2.5	0.96
Does your agency publish or assist in the publication of information focusing on mental health of different cultural group?	34	1.7	0.65
Has your agency conducted or participated in a needs assessment utilizing providers in communities as respondents	34	1.5	0.72
Does agency staff routinely share practice-based "success stories" involving people with minority background?	34	2.0	0.88
Has your agency conducted or participated in a research that focused about individuals with minority background	34	1.5	0.78
Does staff utilize cultural consultants who can help them work more effectively within a cultural context?	34	2.3	0.88
Does your agency convene or reward activities that promote learning new languages relevant to the communities with minority background that the agency serves?	34	1.6	0.76
Does your agency staff routinely discuss barriers to working across cultures?	34	2.4	0.96
Does your agency compile books or culturally-related written materials regarding people of culture?	34	1.9	0.89

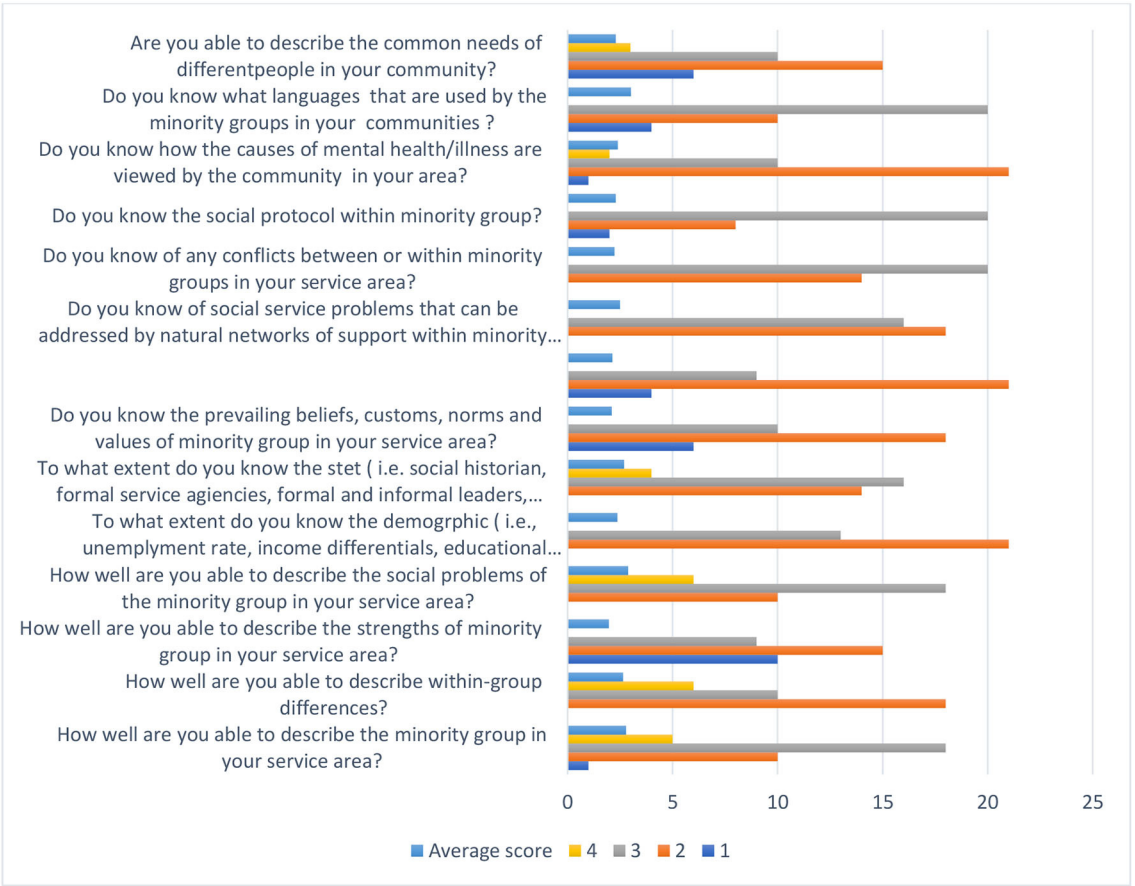


FIGURE 2 | Participants knowledge of the minority communities they serve.

between or within minority groups (M = 2.24, SD = 0.86), awareness of the *social protocols* required within communities (M = 2.3, SD = 0.89), and familiarity of how the *causes of mental health/illness are viewed* by the community in your area (M = 2.4, SD = 0.86). However, participants scored below average on geographic *demographic information* (i.e., unemployment rates, income differentials, educational attainment, crime rate, birth/death rate, homicide rates) within the minority groups they serve (M = 1.9, SD = 0.88); ability to describe the *common needs* of different people in your community (M = 1.97, SD = 0.86); awareness of the *prevailing beliefs, customs, norms, and values* of the minority group in your service area (M = 2, SD = 0.65); knowledge of the *social service needs that go unaddressed* by the formal social service system (M = 2.01, SD = 0.94); knowledge of *social service problems that can be addressed* by natural networks of support within the minority group (M = 2.03, SD = 0.94); and the *prevailing beliefs, customs, norms, and values* of the individuals from minority ethnic backgrounds in their service area (M = 2.0, SD = 0.96).

The *personal involvement* subscale asks eight items to rate participants' involvement in different cultural contexts with the communities they serve from minority backgrounds (see **Figure 3**). Descriptive analysis of personal involvement shows that, on average, participants indicate a high level of time spent *working and meeting others* from different cultural backgrounds (M = 3.0, SD = 0.88). Participants also scored above average for items that include the following: *participation to community forums* (M = 2.68, SD = 0.98), cultural or ethnic-based *holidays* (M = 2.35, SD = 0.98), pursue *recreational activities* (M = 2.59, SD = 1.00), *patronizing businesses* owned by a minority group (M = 2.59, SD = 0.98), and *interactions* with minority groups in their service area (M = 2.5, SD = 0.96). All of these indicate that professionals spent a moderate level of time working and meeting others from different cultural backgrounds than their own. Participants' responses found to be below average include attendance at *interagency coordination meetings* (M = 1.79, SD = 0.86) and *school-based meetings* (M = 1.94, SD = 0.88), which indicates participants' low level of personal involvement in coordination with community-wide initiatives.

The aggregated score for the *multicultural resources and use of linkages* subscale (see **Table 4**) indicates that professionals in the study lack knowledge of resources and relevant links to support culturally competent service provision. Participants rated below average for knowledge of community agencies' *publications* (M = 1.7, SD = 0.65), the conducting of a *need assessment* (M = 1.5, SD = 0.72), conducting *research* (M = 1.5, SD = 0.78),

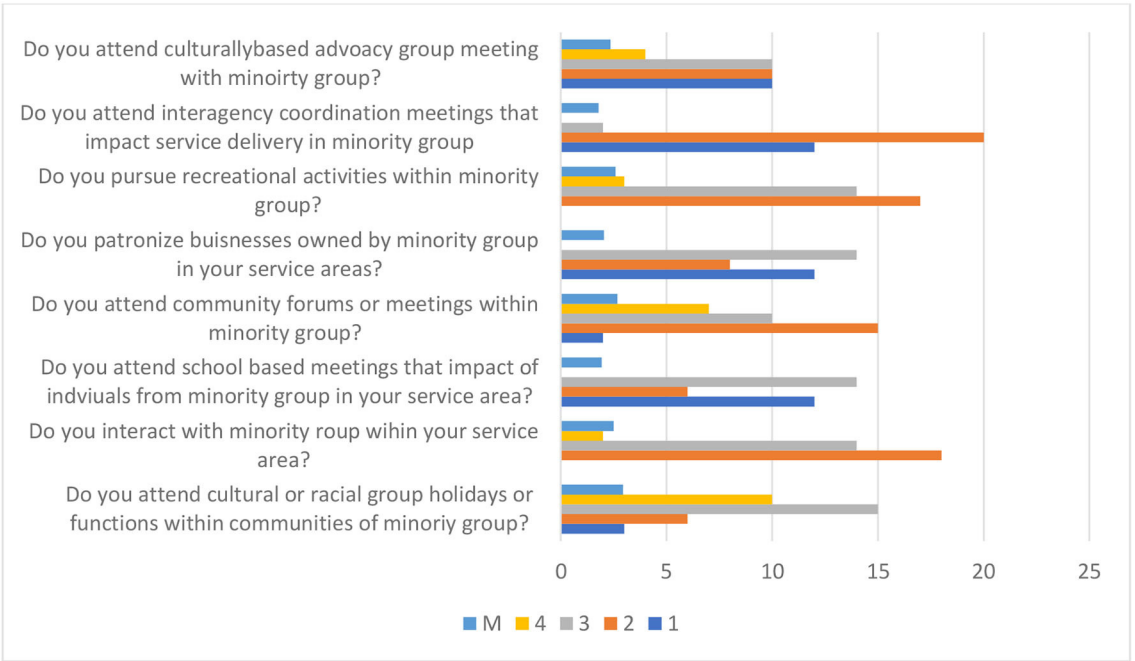


FIGURE 3 | Participants score on personal involvement in diversity.

TABLE 4 | Agency policies and procedures addressing cultural diversity.

As a matter of formal policy, does your agency	*N*	M	SD
• Use culture-specific assessment instruments for diagnosis?	34	2.5	0.89
• Use culture specific treatment approaches?	34	2.5	0.88
• Envision community empowerment as a treatment goal?	34	2.3	0.89
• Review case practice on a regular basis to determine relevancy to clients with minority background?	34	1.5	0.78
• Provide or facilitate child care?	34	1.2	0.96
• Consider culture in service plans?	34	1.9	0.88
• Conduct outreach to community based organizations, social service agencies, natural helpers, or extended families?	34	1.7	0.72
• Take referrals from non-traditional sources?	34	2.6	0.94
• Translate agency materials into languages that reflect the linguistic diversity in your service area.	34	1.5	0.66
• Advocate for a better quality of life for minority group in addition to providing services.	34	2.1	0.76
Is information on the ethnicity or culture of clients specifically recorded in your organization management information system?	34	2.7	0.88
Does your organization or agency reach out to churches and other places of worship, clergy persons, ministerial alliances, or indigenous religious leaders in communities with minority background?	34	1.9	0.89

promoting *new language learning* ($M = 1.6$, SD $= 0.76$), and being able to compile books *or culturally related written materials* regarding people of cultures outside their own ($M = 1.9$, SD $= 0.89$). Participant scores on the following items were above average: connections with *institutions of higher education* ($M = 2.5$, SD $= 0.96$), routine discussion with their staff about *barriers working across cultures* ($M = 2.4$, SD $= 0.96$), staff's ability to utilize relevant *cultural consultants* ($M = 2.3$, SD $= 0.88$), and staff routinely sharing practice-based "*success stories*" ($M = 2.00$, SD $= 0.88$).

The use of *organizational policy and procedures* to promote diversity and culturally responsive practices subscale (see **Table 5**) indicates that participants' responses are above average for agency policy and procedures on items including the following: use of cultural specific assessment ($M = 2.5$, SD $= 0.89$), use of cultural specific treatment approaches ($M = 2.5$, SD $= 0.88$), *e*nvisioning community empowerment as a treatment goal ($M = 2.3$, SD $= 0.89$), and taking a referral from a non-traditional source ($M = 2.6$, SD $= 0.94$). However, participants' responses were below average on the policy and procedure practice to review cases on a regular basis to ensure they are sensitive to clients with a minority background ($M = 1.5$, SD $= 0.78$); provide or facilitate child care ($M = 1.2$, SD $= 0.96$); consider culture in service plans ($M = 1.9$, SD

TABLE 5 | Descriptive score of each subscale by gender.

Subscale	Total ($N = 34$)		Women ($N = 7$)		Men ($N = 27$)	
	M	SD				
Community knowledge	2.620	0.4356	2.7737	0.33902	2.4670	0.44067
Personal involvement	2.381	0.62131	2.433	0.70238	2.3333	0.61017
Resources linkages	1.933	0.61273	1.8024	0.87646	1.9904	0.52932
Organizational policy	2.03	0.63049	1.9857	0.56988	2.0936	0.65353

= 0.88); use outreach to community-based organizations, social service agencies, natural helpers, or extended families (M = 1.7, SD = 0.72); and translate agency materials into languages that reflect the linguistic diversity in your service area (M = 1.5, SD = 0.66). Regarding the establishment of agency procedures for *r*ecording information on ethnicity or cultural clients, participants' score was above average (M = 2.7, SD = 0.88). The agencies' procedures were rated below average (M = 1.9, SD = 0.89) for reaching out to church and other places of worship or indigenous religious leaders in communities of the minority.

Overall, participants scored above average on community knowledge (M = 2.62, SD = 0.435) and personal involvement (M = 2.38, SD = 0.621) when compared to resource use and linkages (M = 1.93, SD = 0.61) and organizational policies (M = 2.03, SD = 0.63). Participants' responses for the four subscales based on gender (**Table 5**) show that female participants, on average, score slightly higher compared with the men's responses on community knowledge (female: M = 2.77, SD = 0.33 | male: M = 2.4670, SD = 0.44) and personal involvement (female: M = 2.43, SD = 0.702 | male: M = 2.33, SD = 0.610). However, men's responses for knowledge of resource linkage (M = 1.99, SD = 0.52) and organizational policy and procedures (M = 2.09, SD = 0.65) are slightly higher than women's (M = 1.80, SD = 0.87 for resource and linkage; M = 1.98, SD = 0.569 for organizational policy).

DISCUSSION AND FUTURE DIRECTIONS

Much of the literature regarding professional development stresses the importance of designing activities that are compatible with the characteristics of adult learners (45). Adult learners tend to be self-directed in that they can identify their weaknesses and they can be partners in developing corrective plans of action. Because this 5-day workshop was at the request of local health service providers and conducted in conjunction with university support, it does suggest that these professionals were indicating a readiness for learning. Under this assumption, most workshop trainings focus on the criteria of professional satisfaction to evaluate the usefulness of the presentations. While this is arguably important, it is also sorely inadequate to measure the effectiveness of the training activities. Indeed, Moore (45) also cautions that one of the challenges of training adults is their tendency to adhere to their preferred ways of knowing and relying on previously established information. As such, it was critical to measure the learning of these participants in a manner that would be expected in preparation for a professional exam. Specifically, the study sought to determine the effectiveness of the workshop by evaluating changes in Ethiopian professional's ability to (a) detect, (b) assess, and (c) plan interventions for individuals with ASDs. Results showed uniformly significant improvements in learning in all areas.

It is perhaps not surprising that bright individuals would learn quickly. However, given that these professionals had very limited training in ASD, and during the training, as noted by Moore (45), they showed patterns where they relied on, and at times had interference from, traditional interpretations for the causes of ASD, it is important and impressive to note their adherence to decision-making that was scientifically informed during the posttest. Identifying the correct answer during a recognition task (i.e., multiple choice where the answer is available) may have provided an opportunity for good guessing. However, phony learning is much harder to pull off when the task is in the conceptualization of the practice cases.

Regardless of the professional development topic, it is essential that all education and training experiences explicitly address how professionals need to relate to individuals from diverse cultural and linguistic backgrounds. Training needs to also explicitly address the implementation steps for developing any new practices. As such, we also considered the multicultural competencies (e.g., knowledge of community culture, personal involvement, resource and linkages, and organizational policy and procedure) of these helping professionals. Here, the data were more mixed; yet, they highlight key areas for development. For example, under the *knowledge of community culture*, there was room for improving the *common needs* of different people in your community; awareness of the *prevailing beliefs, customs, norms, and values* of the minority group in your service area; knowledge of the *social service needs that go unaddressed* by the formal social service system; knowledge of *social service problems that can be addressed* by natural networks of support within the minority group; and the *prevailing beliefs, customs, norms, and values* of these groups. In fact, there were areas of improvement noted across all of the subscales (i.e., *personal involvement*, *resource and linkages*, and *organizational policy and procedure*). In practical terms, these data can help these professionals identify areas of improvement in their practice. The areas of growth can serve as a checklist for them in their planning for the next steps in professional practices.

As with all studies, this one has a number of limitations. First, the sample size was small. This study only looked at immediate knowledge and skill acquisition. There was no follow-up to see if information was retained and used in subsequent practice. The training used vignettes and was not with real patients; as such, there was limited decision-making not confounded by the interpersonal interactions between the provider and the patient.

CONCLUSIONS

It is likely that these professionals would further benefit from repeated professional practice and coaching during *in situ* case

decisions. Given the growing awareness of ASD, there is a clear need to expand the education efforts across Africa and other developing countries. Kegan (46) provides helpful guideposts regarding the way to create a bridge from current beliefs and practices to new directions in professional service provision. The process includes the following:

- Asking professional what they already know about—or want to know about—related to the mental health professional development topic.
- Surveying professionals regarding both successes and challenges on the topic prior to the teacher professional development learning events.
- Inviting professionals to share stories from their experiences—as students or when they have obtained their professional role—that connect with the professional with the new topic.

This type of iterative and reflective process can ensure that the next steps in professional development planning are accomplished. These steps also serve to develop and sustain professional motivation.

The results from this study can serve as one data point in the effort to describe the status of the needs for mental health training for service providers in Ethiopia. By beginning to document benchmarks regarding the use and understanding of US mental health standards, we hope to be able to offer an avenue to blend traditional and modern practices that resonate with the local community [see Hughes et al. (47)]. That is, although there is a general public perception and acceptance that there is a need to expand services to the African population, there is little to document the current state of the need.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Duquense University IRB. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

WZ and TH design the study, conduct the training, collect the data, and write the result. GK provided consultation on the statistical analysis of the data. All authors contributed to the article and approved the submitted version.

REFERENCES

1. Johnson CP. Early clinical characteristics of children with Autism. In: Gupta, V.B. ed: *Autistic Spectrum Disorders in Children*. New York, NY: Marcel Dekker, Inc. (2004). p. 85-123.
2. Baio J, Wiggins L, Christensen DL, Maenner MJ, Daniels J, Warren Z, et al. Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014. *MMWR Surveill Summ*. (2018) 67:1–23. doi: 10.15585/mmwr.ss6706a1
3. World Health Organization. Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level (2017). Retrieved from: http://apps.who.int/gb/ebwha/pdf_files/EB130/B130_9-en.pdf
4. Bakare M, Munir KM. Excess of non-verbal cases of autism spectrum disorders presenting to orthodox clinical practice in Africa – a trend possibly resulting from late diagnosis and intervention. *South African J Psychiatry*. (2011) 17:118–20. doi: 10.4102/sajpsychiatry.v17i4.295
5. Mankoski RE, Collins M, Ndosi NK, Mgala EH, Sarwatt VV, Folstein SE. Etiologies of autism in a case-series from Tanzania. *J Autism Dev Disorders*. (2006) 36:1039–51. doi: 10.1007/s10803-006-0143-9
6. Zeleke W. Children with autism in Ethiopia: Diagnosis, legal, and educational services. *J Int Association Special Educ*. (2016) v16 n1 p64-72 https://eric.ed.gov/?id~=~EJ1153788
7. Zeleke WA, Hughes TL, Chitiyo M. The Path to an Autism Spectrum Disorders Diagnosis in Ethiopia: Parent Perspective. *Am J Orthopsychiatry*. (2018) 88:316–27. doi: 10.1037/ort0000249
8. de Vries PJ. Thinking globally to meet local needs: Autism spectrum disorders in Africa and other low-resource environments. *Curr Opin Neurol.* (2016) 29:130–6. doi: 10.1097/WCO.0000000000000297
9. Matson JL, Matheis M, Burns CO, Esposito G, Venuti P, Pisula E, et al. Examining Cross-cultural difference in autism spectrum disorder: a multinational comparison from Greece, Italy, Japan, Poland and the United States. *Eur Psychiatry*. (2017) 42:70–6. doi: 10.1016/j.eurpsy.2016.10.007
10. Berg A. Connecting with South Africa: Cultural communication and understanding. College Station, TX: Texas A&M University Press. (2012).
11. Ruparelia K, Abubakar A, Badoe E, Bakare M, Visser K, Chugani DC, Newton CR. Autism spectrum disorders in Africa: Current challenges in identification, assessment, and treatment: A report on the international child neurology associating meeting on ASD in Africa, Ghana, April 3-5, 2014. *J Child Neurol.* (2016) 31:1018–26. doi: 10.1177/0883073816635748
12. Elsabbagh M, Divan G, Koh Y-J, Kim YS, Kauchali S, Marcín C, et al. Global prevalence of autism and other pervasive developmental disorders. *Autism Res.* (2012) 5:160–79. doi: 10.1002/aur.239
13. Bakare MO, Agomoh AO, Ebigo PO, Eaton J, Okonkwo KO, Onwukwe JU, Onyeama GM. Etiological explanation, treatability and preventability of childhood autism: a survey of Nigerian healthcare workers' opinion. *Annals General Psychiatry*. (2009) 8:1–8. doi: 10.1186/1744-859X-8-6
14. Folstein SE, Rosen-Sheidley B. Genetics of autism: Complex aetiology for a heterogeneous disorder. *Nat Rev Genetics*. (2001) 2:943–55. doi: 10.1038/35103559
15. Vecchiato NL. Traditional medicine. In: H. Kloos, Z. A. Zein editors. The Ecology of Health Disease in Ethiopia. Boulder, CO: Westview Press. (1993). pp. 157–178. doi: 10.4324/9780429310232-10
16. Bakare MO, Ebigbo PO, Agomoh AO, Menkiti NC. Knowledge about childhood autism among health workers (KCAHW) questionnaire: description, reliability and internal consistency. *Clin Pract Epidemiol Mental Health*. (2008) 4:1–8. doi: 10.1186/1745-0179-4-17
17. Zeleke, W. Nichols L, Wondi Y. Mental health in ethiopia: helping professionals' perspective of counseling alignment with culture. *Int J Advancement Counseling*. (2019) 41:214–29. doi: 10.1007/s10447-018-9368-5
18. Zeleke W, Chiytio M, Hughes TL. Autism service providers report: Behavioral and educational interventions used in Ethiopia. *Int J School Educ Psychol.* (2017) 6:176–87. doi: 10.1080/21683603.2016.1278568
19. Isaacson G, Buchinsky FJ. More than a surgical mission–pediatric Otolaryngology in Ethiopia. *Int J Pediatr Otorhinolaryngol*. (2011) 75:1018–9. doi: 10.1016/j.ijporl.2011.05.007

20. United Nations Children's Fund (2010). *Special Edition - Celebrating 20 Years of the Convention on the Rights of the Child*. State of the World's Children. p. 98. doi: 10.18356/0ce46b91-en
21. Lagler H, Vargha R, Wagner O, Seidler H, Ramharter M. Global health and social responsibility: a pilot project of the Medical University of Vienna in eastern Ethiopia. *Wien Klin Wochenschr*. (2010) 122:76–80. doi: 10.1007/s00508-009-1237-0
22. Sathiyasusuman A. Mental health services in Ethiopia: emerging public health issue. *Public Health.* (2011) 125:714–6. doi: 10.1016/j.puhe.2011.06.014
23. Desta M. *Epidemiology of Child Psychiatric Disorder in Addis Ababa, Ethiopia*. Umea: Division of child and Adolescent Psychiatry, Department of Clinical Science, Umea University (2008).
24. Tefera B, Admas F, Mulatie M. Education of children with special needs in Ethiopia: analysis of the rhetoric of "education for all" and the reality on the ground. *Ethiop J Educ.* (2015) 35:45–97.
25. Wondie Y. Reflection on the development of Psychology in Ethiopia and future direction. *Int Rev Psychiatry.* (2014) 26:585–8. doi: 10.3109/09540261.2014.917611
26. Federal Democratic Republic of Ethiopia Ministry of Health. *Health Sector Transformation Plan (HSTP) 2015/16 -2019/20*. FDRE (2015). Retrieved from: http://midwives.org.et/sites/default/files/HSTP%20Final%20Print%202015-10-19%20Small%20size.pdf
27. FMOH. *Health Sector Transformation Plan 2015/16 – 2019/20*. Addis Ababa: MOH (2015).
28. Christensen DL, Baio J, Van Naarden Braun K, Bilder D, Charles J, Constantino, JN, et al. Prevalence and characteristics of Autism Spectrum Disorder among children aged 8 years – Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2012, *MMWR Surveill Summ*. (2016) 65:1–23. doi: 10.15585/mmwr.ss6503a1
29. Packer A. Neocortical neurogenesis and the etiology of autism spectrum disorder. *Neurosci Biobehav Rev.* (2016) 64:185–95. doi: 10.1016/j.neubiorev.2016.03.002
30. Sandin S, Lichtenstein P, Kuja-Halkola R, Larsson H, Hultman CM, Reichenberg A. The familial risk of autism. *JAMA*. (2014) 311:1770–7. doi: 10.1001/jama.2014.4144
31. Inglese MD, Elder JH. Caring for children with autism spectrum disorder, part1: Prevalence, etiology, and core features. *J Pediatric Nursing*. (2009) 24:41–8. doi: 10.1016/j.pedn.2007.12.006
32. Sanua VD. A comparative study of opinions of U.S.A. and European professionals on the etiology of infantile autism. *Int J Soc Psychiatry*. (1986) 32:16–30. doi: 10.1177/002076408603200203
33. Mitchell GE, Locke KD. Lay beliefs about autism spectrum disorder among the general public and childcare providers. *Autism*. (2015) 19:553–61. doi: 10.1177/1362361314533839
34. Hixon MD, Wilson JL, Doty SJ, Vladescu JC. A review of the behavioral theories of autism and evidence for an environmental etiology. *J Speech Language Pathol Appl Behav Anal*. (2008) 3:46–59. doi: 10.1037/h0100232
35. Vismara LA, Rogers SJ. Behavioral treatments in autism spectrum disorder. What do we know? *Annu Rev Clin Psychol*. (2010) 6:447–68. doi: 10.1146/annurev.clinpsy.121208.131151
36. Akins RS, Krakowiak P, Angkustsiri K, Hertz-Picciotto I, Hansen RL. Utilization patterns of conventional and complementary/alternative treatments in children with autism spectrum disorders and developmental disabilities in a population-based study. *J Dev Behav Pediatrics*. (2014) 35:1–10. doi: 10.1097/DBP.0000000000000013
37. Moore DS. *The dependent gene: The fallacy of "nature vs*. nurture." New York, NY: Henry Holt. (2001).
38. Pitten K. How cultural values influence diagnosis, treatment and welfare of families with an autistic child. *Rev Acad J.* (2008) 4:1–5.
39. Fewster DL, Gurayah T. First port of call: Facing the parents of autism spectrum disorder. *South African Family Pract*. (2015) 57:31–4. doi: 10.1080/20786190.2014.995917
40. Lagunju IA, Bella-Awusah TT, Omigbodun OO. Autistic disorder in Nigeria: profile and challenges to management. *Epilepsy Behav*. (2014) 39:126–9. doi: 10.1016/j.yebeh.2014.08.020
41. Gona JK, Newton CR, Rimba K, Mapenzi R, Kihara M, Van de Vijver FJR, Abubaker A. Parents' and professionals' perceptions on causes and treatment options for autism spectrum disorders (ASD) in a multicultural context on the Kenyan Coast. *PLoS ONE*. (2015) 29:e0132729. doi: 10.1371/journal.pone.0132729
42. Perepa P. Cultural basis of social 'deficits' in autism spectrum disorders. *Eur J Special Needs Educ.* (2014) 29:313–26. doi: 10.1080/08856257.2014.908024
43. Mason JL. *Cultural Competence Self-Assessment Questionnaire: A Manual for Users*. Portland, OR: Research and Training Center on Family Support and Children's Mental Health, Portland State University (1995).
44. Cross T, Bazron B, Dennis K, Isaacs M. *Towards a Culturally Competent System of Care, Volume I*. Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center (1989).
45. Moore J. Guidelines concerning adult learning. *J Staff Dev*. (1988) 9:2–5.
46. Kegan R. *In Over Heads: The Mental Demands of Modern Life*. Cambridge, MA: Harvard University Press. (1994).
47. Hughes TL, Quinn C, Tiberi A, Zeleke WA. Developing a framework to increase access to mental health services for children with special needs in Ethiopia. *Front Educ*. (in press).

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Sociology

ORIGINAL RESEARCH
published: 05 March 2021
doi: 10.3389/fsoc.2021.573306

System Responsiveness to the Psychosocial and Mental Health Needs of Children in Ethiopian Primary Schools: The Case of Gondar City, Northwest Ethiopia Needs

Yemataw Wondie and Tesfaye Tadele*

Department of Psychology, University of Gondar, Gondar, Ethiopia

Background: Ethiopia is the second most populous nation in Africa with children and adolescents constituting more than 40% of the population. Evidence shows the onset of significant degrees of mental illnesses is detectable in this age range. For such early identification to be made there should be a system responding to those needs.

Objective: The objective of this study was to explore the extent to which the education system is responsive to the psychosocial and mental health needs of children in primary schools through putting appropriate professionals in place, raising teachers' awareness and putting in place viable policies and guidelines.

Methods: An exploratory qualitative study was conducted in public and private primary schools in Gondar city Data was collected through focus group discussions from seventeen participants drawn from both schools and key informant interviews with two experts from the zonal Department of Education. A thematic qualitative data analysis was employed. Themes were identified with the help of the Nvivo 12 plus software.

Results: We found teachers' mental health awareness is very low with parameters such as magnitude, case identification and support. There is an exception in terms of causal attributions of mental illness that matches with scientific literature. Psychosocial support and mental health resources are not available and schools do not provide capacity building mental health trainings for teachers which might help them to identify, handle and make referrals of mental health cases. We also found the Ethiopian education policy and other guidelines do not address the issue of mental health at primary school level.

Conclusion: The Ethiopian education system is not responsive to the psychosocial and mental health needs of children in primary schools.

Implications: Arresting minor impairments before they become major disabilities is vital. Investing in childhood mental health enables a healthy and productive society to be cultivated. The Ethiopian education system should therefore respond to the psychosocial and mental health needs of children in primary schools.

OPEN ACCESS

Edited by:
Waganesh A. Zeleke, Duquesne University, Pittsburgh, PA, United States

Reviewed by:
Shu-Ping Chen, University of Alberta, Edmonton, AB, Canada
Abebaw Gezie, Addis Ababa University, Ethiopia

****Correspondence:***
Yemataw Wondie
yematawonde@gmail.com

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Sociology

Received: *16 June 2020*
Accepted: *11 January 2021*
Published: *05 March 2021*

Citation:
Wondie Y and Tadele T (2021) System Responsiveness to the Psychosocial and Mental Health Needs of Children in Ethiopian Primary Schools: The Case of Gondar City, Northwest Ethiopia Needs. Front. Sociol. 6:573306. doi: 10.3389/fsoc.2021.573306

Keywords: system responsiveness, teachers, policies, primary schools, psychosocial conditions, mental health condition, Ethiopia

INTRODUCTION

Studies show 20% of children and adolescents have at some point experienced mental health issues in the form of social, emotional and behavioral difficulties (Loades and Mastroyannopoulou, 2010). Specifically, 50% of mental health disorders begin by the age of 14 and 75% by the age of 24 (Kessler et al., 2005). Mental illness among young people have significant association with bad school performance, a low level of social interaction, trouble with the law, higher school dropout and teenage pregnancy rates (Breslau et al., 2008).

Early identification and treating of children with mental illnesses would reduce the personal and societal burden of these disorders and offer early chances for treatment in addition to protecting the children from a possibility of worsening academic and social functioning (Miller, 2014).

The school community is an unprecedented opportunity to improve the lives of children and adolescents. The World Health Organization (WHO) urges a comprehensive mental health program be part of a comprehensive school health program including health instruction at all grade levels, easily accessible health services, a healthful nurturing and safe environment and interaction with families and community organizations (WHO, 1994). The school system and teachers are significant parties to activities aimed at promoting childhood mental health and treating mental disorders, especially in low- and middle-income countries (Patel et al., 2008).

In contrast to parents who are biased observers, teachers are neutral and can detect the behavioral changes of their students if they are trained to do so (Parikh et al., 2016). Teachers can serve in the early identification of mental illnesses, referral to specialists, reducing stigma, and enhancing the awareness of their students about mental illnesses. Many school-based mental health interventions require teacher implementation and selective or indicated interventions often involve teacher referral (Greenberg et al., 2001). However, there is often a lack of knowledge about mental health among school teachers, which impairs their ability to identify those suffering from mental disorders, as well as to educate and handle them (Walter et al., 2006). The lack of information creates insecurity and complicates the teachers' management of everyday situations involving mental disorders (Soares et al., 2014).

In Ethiopia, there has not been yet a national representative study about the prevalence of mental illness. Estimations state that the average prevalence of mental illness in Ethiopia are 18% for adults and 15% for children (Sathiyasusuman, 2011). Such shortage of data about child mental illness is mainly due to severe shortage of child mental health professionals in the country (Desta et al., 2017). It is believed that in Ethiopia, where resources are limited, schools can have a significant role in mental health service provision given limitations of formal mental health care (Desta et al., 2017).

Recently, there have been commitments shown by the Ethiopian government such as development of a mental health strategy and the allocation of new funds for the rollout of that strategy across the country (World Health Organisation, 2016). However, promoting mental health in schools is still not addressed. The present study tried to explore the educational system's degree of responsiveness to the psychosocial and mental health needs of children in primary schools considering schools in the public and private sectors in Gondar northwest Ethiopia.

The specific objectives of this study were 1) to examine the level of awareness of school teachers about the psychosocial and mental health conditions of school children; 2) to explore the psychosocial and mental health support resources available in primary schools, and 3) to explore the education system's responsiveness to the psychosocial and mental health needs of school children in those schools.

METHODS

Research Design

We employed a thematic qualitative approach by which qualitative data was collected using a couple of focus group discussions (FGDs) and with in-depth interviews, useful in generating wide and rich understanding of the participants' experience and beliefs (Mishra, 2016).

Participants

A total of nineteen participants were involved in this study of which seventeen were primary school teachers and two education experts working in the Central Gondar Zone Education Department. Of the primary school teachers, eight were from the University of Gondar Community School and the remaining nine were from a public school known as Abiyot Firie Primary School.

Data Collection Tools

Semi-structured FGD's and interview guides were used to collect data from the study participants. The FGD guide addresses the mental health awareness among school teachers, psychosocial support available in the primary schools, and the system's respond to the psychosocial and mental health needs of school children which are all addressed in the objectives of the study. The interview guide mainly addresses system and structural issues in relation to psychosocial support and mental health in primary schools at district, zonal, regional, and national levels.

Procedures

We followed a series of steps to prepare both the FGD and interview guides. First, the FGD and interview guides were prepared in English; second, they were translated to Amharic, the national language of Ethiopia, and then back translated to

TABLE 1 | Socio-demographic characteristics of study participants.

Participants' affiliation	Sex				Educational status
	M	F	T	Mean age (SD)	
Community school	4	4	8	33 (3.29)	Bachelor to masters degree
Public school	2	7	9	39 (9.37)	Diploma (Grade 12 + 2)
Education department	1	1	2	49 (12.73)	Bachelor degree
Total	7	12	19	37 (8.91)	

English with the help of experts in both languages. Third, the FGDs and key informant interviews were conducted and audio-taped upon securing informed consent from the participants. Finally, the authors transcribed the audio information and translated them to English. The FGD participants from both schools were selected purposively on the basis of their long time services in teaching. We had two FGDs one constituted eight participants and the other nine. Each FGD was one time and took an hour and half. Two key informant education experts were also selected purposively based on their expertize responsible for supervising primary school education. Both the key informant interviews were one time and took an hour each.

Data Analysis

We employed thematic qualitative data analysis. Themes were identified with the help of Nvivo 12 plus software. We followed a number of steps in making the analysis. First, the raw data was entered into Nvivo 12 plus to map the patterns of the data set. Second, meaningful units of codes were extracted from the data sets that include mental health awareness, available psychosocial support and mental health resources, and system responsiveness to psychosocial and mental health needs of school children. Finally, the analysis was made based on these themes corresponding to the research questions.

Ethical Considerations

Ethical clearance was obtained from the Department of Psychology, University of Gondar. Permission was also granted from both of the school principals and the zonal Education Department head. Informed consent was obtained from all the participants and both of the key informants.

FINDINGS

Characteristics of the Study Participants

A total of 19 individuals took part in this study, eight from the University of Gondar (UoG) Community School, and nine from a public school in Gondar called Abiyot Firie Primary School. Apart from this, two experts from the Central Gondar Zone Department of Education also participated. **Table 1** shows details of the participants' characteristics.

The majority (63%) of the study participants were female, their educational status ranging from diploma holder (grade 12 + 2) to masters degree level. Specifically, while the educational status of the participants from the Community School ranged from bachelor to masters degrees, those from the public school were all diploma holders.

Thematic Analysis of the Data

Initially, we had seven categories into which the data obtained from the participants fell, namely: 1) prevalence of mental illness, 2) mental illness identification, 3) causal attribution and treatment options, 4) experiences in supporting children with mental illness, 5) availability of training opportunities on school mental health, 6) organizational structure for referrals, and 7) availability of policies and guidelines on psychosocial well-being and mental health at macro and school levels.

On further inspection and categorization of the data supported by Nvio 12 plus software, we had three distinct themes in line with our research questions. Accordingly, 1) mental health awareness, 2) available psychosocial support and mental health resources, and 3) system responsiveness to psychosocial and mental health needs of school children (see **Figure 1**).

Teachers' Awareness About Psychosocial Issues and Mental Health Among School Children

The participants' awareness about the psychosocial and mental health conditions among school children was assessed using FGDs and key informant interviews made on mental health awareness related issues. These include the extent to which the participants know about the extent of psychosocial and mental health problems among school children, their experience in identifying children with these conditions in and out of the classroom, and their knowledge about the causal attributions and treatment options they may consider for children with such conditions.

Extent of the problem: Almost all the discussants underlined children with psychosocial and mental health conditions are prevalent in their respective schools. However, students with such conditions are seen to be children with special needs. What came to most participants' minds were children with epilepsy, those with intellectual disability, children with sensory impairments and so on. For instance, one of the discussants stated the following.

"There are students with intellectual disability in every classroom. They repeat classes for five to six consecutive years. Because we are not able to help them to get to the desired level, they do not show any progress."

We found no difference between the FGD teacher discussants from the community and public schools when it comes to such

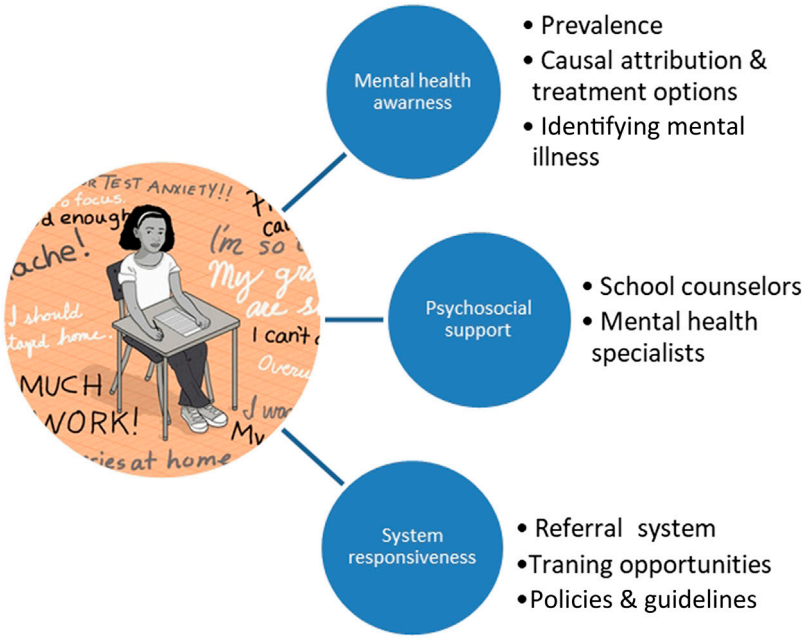


FIGURE 1 | Themes explored on system responsiveness to psychosocial and mental health needs of school children.

understanding in regards to psychological problems and mental illness.

Identifying children with psychosocial and mental health conditions: The participant school teachers' awareness about psychosocial mental health conditions of their students was also assessed in terms of the mechanisms they employ to identify children with such conditions. Accordingly, various strategies are employed, most of which use observation. We tried to classify and analyze such observed conditions and identified them in terms of thought-related, emotion-related, and behavior-related conditions. However, the participants were not able to give such labeling to the various psychosocial and mental health conditions of school children.

In terms of *thought-related conditions*, the discussants identified children who lack concentration and are not able to follow the teacher instruction, some strangely request to go home soon after they arrive at school because they wrongly perceive it was going home time while it was actually too early. Teacher discussants also reported some children have low achievements compared with their classmates consequently they repeat classes; some have a problems of understanding and some forget and are unable to remember things. Related with thoughts, school teachers also reported some students who cut their peers with sharp objects which appears to be "normal" for them because they don't regret their actions. Some were also observed giggling or singing while classes were conducted.

The participants were also able to observe children having *emotion-related conditions*. These children to be observed with lower in emotions such as experiencing sadness, social isolation and loneliness. More specifically, such children prefer to stay passive and hence are not able to move on and play with other children; don't participate in the classroom responding to questions when asked; they don't communicate when spoken to; unable to maintain eye contact while talking (shyness); prefer to stay in their own world rather than paying attention to their surroundings; and they tend to be more passive compared with their peers. On the other hand, some children are observed to have high emotion-related conditions, showing anger and impulsiveness.

The discussants' whether in or out of the classroom observations and reports of their respective students' conditions could fall under behavioral problems. Some such *behavior-related conditions* include being resistant to follow rules, repeating words a teacher might have spoken to students in a class and continuing that behavior for days, kicking classmates and spitting on others, throwing backpacks through the window, repeated crying spells, splashing water on others while class is being conducted, being hyperactive, and irrationally screaming, standing up or laying on the floor during class time.

Causal attributions of psychosocial and mental health conditions: The teachers' awareness of such conditions was explored on their knowledge of the various causal factors to which school children's conditions could be attributed. Asked about the possible causes of these conditions, the discussants brought a number of issues into the FGDs that could be seen as *natural vs. environmental causes*. While the predominant cause the discussants considered natural is believed to be genetic, those considered environmental are a wide range of conditions that could happen during pregnancy and after birth.

Pertaining to *prenatal environmental causes*, the participants believe anything that could happen to the mother or the fetus during pregnancy could cause psychosocial and mental health conditions on children sooner or later. These include lack of a

balanced diet during pregnancy, taking drugs during pregnancy; a pregnancy in the mothers later years, accidents during pregnancy, and the socio-emotional condition of pregnant mothers.

Concerning postnatal causes, the discussants considered a number of issues including but not limited to corporal punishment that could be experienced at home, school or both, restricting children to stay behind closed doors (not allowing children to play with others or an inability to contact their parents), lack of love and attachments with parents, when parents knowingly or unknowingly give unbalanced attention to one of their children compared with their siblings, trauma due to accidents such as falling or getting stabbed, familial disintegration such as divorce, and lack of a balanced diet, a condition by which children may not get essential nutrients important for brain development.

Unlike the case in the general population, we did not find all the school teacher participants attributing psychosocial and mental health conditions of their students to demonic possessions. We can, therefore, fairly state that the participants' attribution of causality sounds more scientific. Under the theme of mental health awareness, the participants unveiled the significant magnitude of the problem.

Treatment options: Finally, as part of the teachers awareness on psychosocial and mental health conditions of school children, the discussants were asked about the treatment options they thought to be considered. The treatment options they considered include health professionals, psychologists, special classroom arrangements to be taught by trained professionals, spiritual interventions such as Holy Water treatment, and provision of unconditional love and affection for children with psychosocial and mental health conditions across all levels (family, community, school).

Availability of Psychosocial Support and Mental Health Resources for School Children

Participants were asked about psychosocial supports made and what resources are available in order to make correct intervention for children with psychosocial and mental health conditions. In both schools, there is no school counselor or mental health specialist assigned to help children with their conditions. Given this, the participant school teachers stated the day-to-day challenges they are facing with a sense of intense despair. The following anecdotes portray such situations.

"There is no as such significant support we provide to children with mental illness in our school. The maximum we can do is sending them to their parents or the school nurse."

Bothered by such challenges, one of the participant teachers also stated her situation as follows.

"There is nothing I could do to the children with mental illness in the classroom. Sometimes because they don't go along with other students in terms of attending my class, I let them to stay out and get relaxed until I finish teaching."

Another participant from the public school FGD group stated the alternatives they employ to address children's conditions in the school system where there are huge number of students in every classroom.

"We try to support children with mental illness as much as possible. If we don't have enough time because of the large number of students, we team up these children with academically good students. We also try to give them special attention and support them. If they are much less than our expectations (poor handwriting, for example), we discuss the problem with parents and try to find better ways for improvement."

Teachers also reported urging students to bring their parents so they could advise them for a better follow up; and using school clubs such as Civic and Ethical Education Club to generate some relevant resources toward helping students cope with their conditions.

System Responsiveness and Organizational Structure

Given all the challenges mentioned, we wondered how the school system in particular and the micro level education organizational structure could be responsive to those challenges. In this connection, we asked all the participants a series of questions for their reflections.

Capacity building trainings: One is about their opinion on the importance of getting *capacity building trainings* on psychosocial and mental health conditions of school children, and whether or not they have ever taken such a training so far. On this, all the discussants in both schools equally stated the importance of school psychosocial and mental health training. However, they have never taken such training. A participant stated this as follows.

"No question about the importance of getting such training because important others for children/students next to their parents/families are teachers ... who could be able to know and identify the mental health conditions students might have. Unfortunately, there is no any training given to us in our school related to mental health so far. Therefore, if training on mental health is given to teachers, we can help identifying problems among our students."

This shows that the school system is not responding to the psychosocial and mental health needs of school children through providing capacity building trainings to the existing teachers let alone hiring the respective professionals in the field.

Organizational structure: The other issue raised and discussed with the participants was whether there was any *organizational structure* such as a tripartite relationship (i.e., school administration, teachers and parents) available to respond to the psychosocial and mental health needs of school children. Discussants from both FGD arrangements stated there was no such functional organizational structure that could respond to the needs of those school children. The following anecdotes clearly portray what members of the FGDs had to say during the discussion. For instance, a discussant from the community school critiqued what was lacking from each stakeholder.

"There is no established system on the relationship among students, school administration and teachers with respect to mental health. Parents don't want to believe and accept psychosocial and mental health problems of their children. They do not also want to give information to teachers/the school on the mental health status of their children. In addition, the main focus of the school administration is on the academic performances of the students rather than showing readiness and acknowledging what other problems they might have."

Another discussant from the same school also underlined that the relationship among teachers, parents and the school administration around mental health issues of the students is negligible. The school doesn't request any information regarding the health/mental health status of the students for admission, which clearly demonstrates schools do not have any intentional actions toward addressing the psychosocial and mental health conditions of their students.

On the other hand, we have realized there are some of functional clubs in the public school through which teachers and students come together to support children in need. For example, one of the participants from this school stated the following.

"We have a Civic and Ethical Education Club in our school. The club tries to identify children with mental illness/ intellectual disability and we give them some sort of guidance and counseling and tutorial and follow up to the needs of these children."

Even then, it is difficult to say that such endeavors of kind-hearted teachers and students could address the needs of children with psychosocial and mental health conditions. Another participant from the community school believes in the importance of having the right person in the right place.

"Mental health issue does not have any responsible body in our school. It is hard to say that we are fully serving our students with mental illness in the absence of a trained professional assigned to the clubs or committees. There should be a person with the necessary knowledge, skills and attitudes who could better serve them."

Referral system: What we have tried to explore so far shows that schools do not have mental health resources to support school children in need. With this in mind, we asked the discussants in both schools whether there is a structured *referral system* in place for children in need of professional counseling or mental health treatment. All the discussants said there is no established system in place, but there are individual-teacher information-based referrals in the schools, clearly the lack of cultured and shared referral system.

For instance, there were participants who stated "*Whenever we encounter such kind of students, we only inform their parents to make the necessary care and follow up*." Another participant from the community school says "*Previously, we used to refer students with mental illness to the school's guidance and counselor. We don't have such a professional in our school currently.*" Still another discussant from the same school stated "*Whenever I have students with mental or any other illness, I refer them to the school nurse. I think the school nurse will further refer them to treatments she may consider appropriate for them*."

Policies and guidelines on psychosocial support and school mental health conditions:

We tried to explore the issue of whether or not policies, guidelines and follow ups on the psychosocial and mental health conditions of school children are available through key informant interviews. As experts in the field of psychology, we have two related concerns. On one hand, most of the proliferating higher education institutions (HEI) in Ethiopia graduate young professionals at least at a bachelor degree level, these young graduates increasingly end up with no jobs. On the other hand, given the fact that the onset of most psychosocial conditions and mental illness is during childhood, especially primary school age, whether Ethiopian primary schools have started hiring mental health professionals such as psychologists which was not the case in the past, when we were in those schools.

We raised a series of related questions for our key informants. These included 1) the degree of attention given to the psychosocial and mental health conditions of children in the primary schools across all (i.e., national, state, zonal and district) levels, 2) whether there is any structural support given to this, 3) whether there is any commitment on the ground in assigning trained professionals in the field, and 4) whether they have envisioned to put the service in place that is supported by policy or guideline.

In our conversations with key informants the issue of children's psychosocial and mental health conditions and related academic performance appears to be neglected. For instance, one of the key informants' states:

"Among those given attention in our education policy is ensuring equity. Ensuring equity means that paying attention to those segments of the population who didn't get attention from the government or other responsible bodies in the past. In the education sector, there are international agreements about people with special needs that we need to address in providing with access to education such as those with hearing impairment, visual impairment, delayed mental development, learning disability, and those who are not able to attend education due to lack of parental support."

The key informants emphasized the issue of equity but not quality, to which the Ethiopian education policy is committed to address through letting children, regardless of disability, gender and socio-economic status access education. However, we found the psychosocial and mental health conditions, regardless of any disability, gender or socioeconomic status have remained unaddressed. The other key informant also underlined this.

"There is no attention given to the psychosocial and mental health conditions of children at the primary school level so far unlike the issue of special needs education. There is no organizational structure for such a service at this level either except at secondary education level. Even then, we have guidance and counseling professionals in only the 11 out of the 48 high schools in our zone let alone having such a provision at the primary schools level."

According to the key informants, the government has the intention to consider professional psychosocial support at the

primary school level. However, there is much ignorance and resistance on the relevance of such a provision and services with district level officials where the policy and structure allows for high schools. One of the key informants also considered his long term experience in the education system which in his view is stagnant in consideration of this relevant service for the whole development of children. He stated the following.

". . . I was teaching in the elementary and high school levels for 38 years. I then became education expert/officer. When I generally look at the education system, there is no consideration of supporting children with mental illness in the primary school. This is emanated from ignorance and lack of attention to the importance of psychosocial well-being of children at this level of education."

Yet the key informants believe things need to be done based on capacities and priorities. By capacity, they meant the government has not the budget or human power to allocate the required resources at the primary school level and by priority, they stated the government's policy direction is to give equitable access to children with special needs. However, this is paradoxical from the objective of the present study which is to explore whether the education system in Ethiopia is responsive to the psychosocial and mental health conditions of children in the primary schools witnessing the abundance of graduates in the helping profession such as psychology remaining jobless; and such important conditions of children with and without special needs remaining unaddressed.

Finally, the FGD participants of both schools recommended what should be done for schools to have psychosocial support and mental health services. Schools, from admission to graduation, need to demonstrate their intention to address the psychosocial and mental health conditions of their students. There should be a functional tripartite engagement among the school administration, teachers and parents to work together toward the psychosocial well-being of school children. They also highlighted the importance of raising awareness of school mental health and developing skills supporting children with these conditions through professionally guided capacity building trainings. Apart from this "schools could do it if they are intentional," issue, the participants believe that there should be no policy or structural barrier that preventing primary schools having psychosocial support and mental health services facilities by trained professionals.

DISCUSSION

As educated in the Ethiopian school system on one hand, and as professionals in the field of psychology with a fair knowledge of the current states of schools in various nations around the world on the other, we wanted to explore the extent to which the education system is responsive to the psychosocial and mental health needs of children in their primary schools in Ethiopia. In this connection, our objectives were 1) to examine the level of awareness of school teachers about the psychosocial and mental health conditions of school children; 2) to explore the psychosocial and mental health support resources available in primary schools, and 3) to explore the education system responsiveness to the psychosocial and mental health needs of school children in those schools.

Teachers' awareness about the psychosocial and mental health conditions of school children was assessed by their relative perception of the degree of the problem, their experience in identifying children with the conditions, and their knowledge about causal attributions and treatment options they may consider for such children. All the participant school teachers perceived the magnitude of mental health problems among school children has become increasingly prevalent. This is in line with previous reports indicating mental illness as the leading non-communicable disorder accounting for 12.45% of the burden of diseases (Uznanski and Roos, 1997). Recent reports also show the average prevalence of mental illness in Ethiopia as 18% for adults and 15% for children (Sathiyasusuman, 2011). However, children with psychosocial and mental health conditions for the participant teachers in our study appear to be children with special needs such us developmental delay, learning disabilities and sensory disabilities showing that primary school teachers do not have mental health literacy. This is similar to other low income countries (Mahmoud et al., 2018).

Participants of the present study tried to identify primary school children with specific psychosocial and mental health conditions. However, they were not able to label such conditions into cognitive, emotional, and behaviorproblems.

Albeit, teachers and the school system, are regarded as important parties in identifying, treating and promoting childhood mental health problems, especially in low and middle income countries, (Patel et al., 2008). Evidence shows that early identification and treatment of children with these conditions would help reduce the personal and societal burden and provide early opportunities for treatment and protect school children from worsening academic and social problems (Miller, 2014). Teachers and other school staff can play such important roles of task-shifting (Lancet Global Mental Health Group, 2007) in the identification and intervention of mental health difficulties when they are equipped with sufficient mental health literacy (Whitley et al., 2013). If well trained, teachers are reported to be neutral observers compared with parents (who have a biased view of their children) and can detect behavioral changes of their school children (Parikh et al., 2016).

Our study participants' causal attribution of mental illness in school children could fall into natural vs. environmental factors. By natural, the discussants meant genetic factors playing roles for mental illness inherited from parental lines. On the other hand, those considered environmental are a wide range of factors that could happen to the child during pregnancy and after birth. This is similar to a study conducted in South Ethiopia (Kerebih et al., 2016) where a range of such factors were reported. Unlike the case in the general population, however, we did not find all the school teacher participants attributing psychosocial and mental health conditions of their students to demonic possessions.

Regarding availability of psychosocial and mental health support resources, there are no school counselors or mental health specialist assigned to help children with their conditions. A guidance counseling service is regarded as a

necessary component of the school system by which each student is enabled to develop a positive self-image and actualize their adjustment needs that leads them into the future (Egbo, 2015). Provision of such an important service to children in primary schools is not new in other African countries such as Zambia (Zimba and Changala, 2018), Kenya (Wambu and Fisher, 2015), and Nigeria (Egbo, 2015).

Trained professionals are not assigned to assume the role of providing guidance counseling and mental health services for children in primary schools, the education system needs to seek strategies to fill this gap. To this end, the discussants and key informants reflected upon the extent to which the school in particular and education system in general are responsive to the psychosocial and mental health needs of school children with their level possible. We considered a number of factors such as capacity building trainings, organizational structure for a functional alliance among school administration, teachers and parents, availability of referral system, and viable policies and guidelines in favor of psychosocial support and mental health in primary schools.

Regarding the capacity building training for school teachers, the result revealed that all the discussants in both the schools considered the importance of school psychosocial and mental health training as high. However, So far they have taken no such training. Lack of information on student mental health jeopardizes teachers' responsibilities and creates insecurity while complicating the management of everyday situations involving mental health problems of school children (Soares et al., 2014). Experiences from elsewhere indicate that school-based mental health interventions requiring teacher implementation and selective or indicated interventions often involve teacher referral (Greenberg et al., 2001). However, lack of knowledge about mental health among school children impairs school teachers' ability of case identification, intervention, and the referral of cases (Walter et al., 2006).

Considering a tripartite relationship among school administration, teachers and parents to alleviate the behavioral and mental health problems of school children, the result revealed that such a functional alliance does not exist. On the other hand, there are a couple of functional clubs in the schools such as "Charity Club" and "Civic and Ethical Education Club" through which teachers and students come together to support children in need. Scaling up and task-shifting of mental health services in low and middle income countries are recommended by WHO (Lancet Global Mental Health Group, 2007; Desta et al., 2017), and have already been practiced in various settings through mental health literacy given to teachers, parents and other school staff (Whitley et al., 2013; Daniszewski, 2013).

A lack of mental health literacy and knowledge about school mental health among teachers affects not only their ability to identify and handle children with psychosocial and mental health conditions but also their ability to make appropriate referrals (Walter et al., 2006). In the present study, the participants unveiled that there were no organized referral system nor were they aware on where to send children with mental health conditions. Perhaps, some refer such children to the school nurse or call parents to take care of their children. This is different from the range of alternative referrals teachers in south Ethiopia would like to make (Kerebih et al., 2016). The difference could be due to teachers in the present study were asked the practical referral system their respective schools use and their actual experience in making referrals compared to a "wish list" of referrals teachers would do in the south Ethiopian study.

Finally, we tried to explore viable policies and guidelines in favor of psychosocial support and mental health in primary schools at a local, regional (i.e., State) and national (i.e., federal) levels. We did this through key informant interviews with the education experts. The result shows school mental health in the Ethiopian primary schools remains unaddressed in the Ethiopian Education Policy (Ministry of Education, 1994) and the recently issued education roadmap (Teferra et al., 2018). Due emphasis is given to children with special needs to get access to education. This is happening while mental health interventions at the primary school level are considered to be so crucial given a significant degree of psychosocial and mental health conditions begin (Breslau et al., 2008) and are prevalent at this level (Kessler et al., 2005). Paradoxically, young university graduates in psychology who could play significant roles in school mental health remain jobless mainly due to the impermissible and non-responsiveness of the education system from taking in those graduates to assume such relevant responsibilities in primary schools. If conditions continue as is and won't improve children with and without special educational needs will not have the right to get psychological and mental health services.

CONCLUSION

The study tried to explore the Ethiopian system of education in regards to degree of responsiveness to the psychosocial and mental health service needs of primary school children through exploring awareness of school teachers, availability of school mental health resources and whether viable policies and guidelines exist. From this qualitative study, we conclude that mental health awareness among the participant school teachers were very low in terms of labeling various psychosocial and mental health conditions in terms of children's experience as cognitive, emotional, and behavioral. Their experience of identifying such conditions was not supported by mental health literacy. On the other hand, we found the teachers' knowledge of causal attribution to be more of scientific than divine-related unlike the general population. While mental health resources such as psychologists and mental health specialists are non-existent in these primary schools, we found no mental health service scaling up and task-shifting capacity building trainings for school teachers. Finally, the provision of school mental health services in primary schools are not addressed in any of the available policy documents in Ethiopia.

LIMITATIONS

Qualitative data was collected from only a community school and a public school in Gondar, Ethiopia. This makes the findings not to be generalized to a wider cultural and geographic context. Participants were approached under the partial lockdown due to the COVID-19 global pandemic. Such a condition might have put them not at ease during the FGDs and the key informant interviews.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by the Ethical Committee of the Department of Psychology, University of Gondar. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

Both authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

ACKNOWLEDGMENTS

We are indebted to all the participants who generously took part in the study under uncertain conditions of the COVID-19 pandemic. We would also like to extend our thanks to Mr. Zenebe and Mr. Solomon, principals of the UoG Community School and the Abyot Firie Elementary School, respectively, for facilitating the FGDs.

REFERENCES

Breslau, J., Lane, M., Sampson, N., and Kessler, R. C. (2008). Mental disorders and subsequent educational attainment in a U S national sample. *J. Psychiatr. Res.* 42 (9), 708–716. doi:10.1016/j.jpsychires.2008.01.016

Daniszewski, T. (2013). *Teachers' mental health literacy and capacity towards student mental health*. University of Western Ontario Electronic Thesis and Dissertation Repository, 1165. Available at: https://ir.lib.uwo.ca/etd/1165 (Accessed March 28, 2013).

Desta, M., Deyessa, N., Fish, I., Maxwell, B., Zerihun, T., Levine, L., et al. (2017). Empowering preschool teachers to identify mental health problems: a task-sharing intervention in Ethiopia. *Int. Mind Brain Educ. Soc.* 11 (1), 32–42. doi:10.1111/mbe.12135

Egbo, J. (2015). Need for guidance and counselling at the primary school level: early intervention strategies for school children. *Br. J. Educ.* 3 (6), 1–8.

Greenberg, M. T., Domitrovich, C., and Bumbarger, B. (2001). The prevention of mental disorders in school-aged children: current state of the field. *Prev. Treat.* 4 (1), 1a. doi:10.1037/1522-3736.4.1.41a

Kerebih, H., Abrha, H., Frank, R., and Abera, M. (2016). Perception of primary school teachers to school children's mental health problems in Southwest Ethiopia. *Int. J. Adolesc. Med. Health* 30 (1), 20160089. doi:10.1515/ijamh-2016-0089

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., and Walters, E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the national comorbidity survey replication. *Arch. Gen. Psychiatry* 62 (6), 593–602. doi:10.1001/archpsyc.62.6.593

Lancet Global Mental Health Group (2007). Scale up services for mental disorders: a call for action. *Lancet* 370, 1241–1252. doi:10.1016/S0140-6736(07)61242-2

Loades, M. E., and Mastroyannopoulou, K. (2010). Teachers' recognition of children's mental health problems. *Child Adolesc. Mental Health* 15 (3), 150–156. doi:10.1111/j.1475-3588.2009.00551.x

Mahmoud, O., Mohamed, A., and Arafa, A. (2018). Impact of awareness program on knowledge of primary school teachers regarding mental disorders among school children. *IOSR J. Nurs. Health Sci.* 7 (3), 61–66. doi:10.9790/1959-0703026166

Miller, J. E. (2014). *Mental illness prevention*. Alexandria, VA: American Mental Health Counselors Association.

Ministry of Education (1994). Education and training policy. Addis Ababa, Ethiopia.

Mishra, L. (2016). Focus group discussion in qualitative research Education and training policy. *TechnoLEARN.* Addis Ababa, Ethiopia. 6 (1), 1–5. doi:10.5958/2249-5223.2016.00001.2

Parikh, N., Parikh, M., Vankar, G., Solanki, C., Banwari, G., and Sharma, P. (2016). Knowledge and attitudes of secondary and higher secondary school teachers toward mental illness in Ahmedabad. *Indian J. Soc. Psychiatry* 32 (1), 56–62. doi:10.4103/0971-9962.176770

Patel, V., Flisher, A. J., Nikapota, A., and Malhotra, S. (2008). Promoting child and adolescent mental health in low and middle income countries. *J. Child Psychol. Psychiatry* 49 (3), 313–334. doi:10.1111/j.1469-7610.2007.01824.x

Sathiyasusuman, S. (2011). Mental health services in Ethiopia: emerging public health issue. *J. Public Health* 125 (10), 714–716. doi:10.1016/j.puhe.2011.06.014

Soares, A. G., Estanislau, G., Brietzke, E., Lefèvre, F., and Bressan, R. A. (2014). Public school teachers' perceptions about mental health. *Revista de saude publica* 48 (6), 940–948. doi:10.1590/S0034-8910.2014048004696

Teferra, T., Asgedom, A., OumerWoldehanna, J. T., Dalelo, A., and Assefa, B. (2018). *Ethiopian education development roadmap*. Addis Ababa: Ministry of Education.

Uznanski, A., and Roos, J. L. (1997). The situation of mental health services of the World Health Organization, African Region, in the early 1990s. *S. Afr. Med. J.* 87, 1743–1749.

Walter, H. J., Gouze, K., and Lim, K. G. (2006). Teachers' beliefs about mental health needs in inner city primary schools. *J. Am. Acad. Child Adolesc. Psychiatry* 45 (1), 61–68. doi:10.1097/01.chi.0000187243.17824.6c

Wambu, G. W., and Fisher, T. A. (2015). School guidance and counseling in Kenya: historical development, current status, and future prospects. *J. Educ. Pract.* 6 (11), 24–32.

Whitley, J., Smith, D., and Vaillancourt, T. (2013). Promoting mental health literacy among educators: critical in school-based prevention and intervention. *Can. J. Sch. Psychol.* 28 (1), 56–70. doi:10.1177/0829573512468852

WHO (1994). *Mental health programs in school*. Geneva, Switzerland: Division of mental health.

World Health Organization (2016). Mainstreaming mental health in Ethiopia. Available at: https://www.who.int/mental_health/mhgap/ethiopia_story_2016/en/ (Accessed April 11, 2016).

Zimba, V., and Changala, M. (2018). The status of guidance and counseling in selected primary schools in Lilanda Zone, Lusaka District, Zambia. *J. Popular Educ. Africa.* 2 (3), 22–34.

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Sociology

SYSTEMATIC REVIEW
published: 07 June 2021
doi: 10.3389/fsoc.2021.573115

Counseling Techniques Supporting West African Children With Adverse Childhood Experiences: A Systematic Review

Shanelle V. Clay, Cheria Jackson and Quincy Stephenson*

Department of Counseling, Psychology, and Special Education, Duquesne University, Pittsburgh, PA, United States

Using a meta-synthesis approach, through the review of current literature, five published and peer reviewed qualitative research reports were studied. The intention was to identify interventions being used with West African children who have endured adverse childhood experiences. These results were found through matching inclusionary criteria and all studies were screened for appropriateness and relevance to the topic matter. The literature was analyzed across five online databases including Proquest, PsychInfo, Scopus, Wiley, and Springer from January 2005 to June 2020. The authors found minimal evidence indicating interventions used in West Africa for adverse experiences related specifically to children, but found themes related to interventions that serve West African families that include children. Findings were thematically analyzed through meta-synthesis and identified four themes used in the interventions, which include western, spiritual, expressive arts, and cultural approaches. West African children endure adverse experiences such as terrorism, abuse, and war violence that contribute to an increasing the need for mental health interventions. These experiences approached from western, spiritual, expressive arts, and cultural vantage points were identified but limited in information about delivery and efficacy, thus providing little guidance regarding further exploratory research.

Keywords: Western Africa, counseling, children, intervention, techniques, counseling techniques, adverse childhood adversities

OPEN ACCESS

Edited by:
Lynne Sanford Koester, University of Montana, United States

Reviewed by:
Yemataw Wondie, University of Gondar, Ethiopia
Missaye Mengstie, University of Gondar, Ethiopia

****Correspondence:***
Shanelle V. Clay
clays@duq.edu

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Sociology

Received: *16 June 2020*
Accepted: *16 March 2021*
Published: *07 June 2021*

Citation:
Clay SV, Jackson C and Stephenson Q (2021) Counseling Techniques Supporting West African Children With Adverse Childhood Experiences: A Systematic Review. Front. Sociol. 6:573115. doi: 10.3389/fsoc.2021.573115

INTRODUCTION

Adverse childhood experiences (ACES), can be described as distressing and traumatic involvements during youth and adolescence such as exposure to abuse (sexual, physical, mental, emotional), introduction to violence, household dysfunction, and separation of family (Kimple and Kansagra, 2018). According to a report conducted by CDC-Kaiser, adverse childhood experiences are common across the world with indication of some populations with a higher probability of exposure due to contrary social and economic circumstances (Felitti et al., 1998). The research steered to identifying the adverse childhood experiences on a global perspective, showing an impact on socio-emotional learning, cognition, and health status after exposure to trauma. Addressing the impact of mental health on school-aged children can be beneficial to their learning. Children exposed to adverse experiences are found to have a greater negative impact on health status, which may reduce their lifespan (Herzog and Schmahl, 2018).

West African children are exposed to adverse childhood experiences that are unique in comparison to other parts of the world. An article by Herzog and Schmahl (2018) states, malnutrition, exposure to violence through witnessing death of family members, committing murder or violent acts as child soldiers, sexual violence, genital mutilation, and war are listed as potential adverse childhood experiences in West Africa. In a presentation by Ogunkua et al. (2019), an ACES self-report was completed by teachers in training to reflect their own childhood trauma in Nigeria. The results showed that over 66% of the respondents who work in schools reported to have at least one adverse childhood experience and one in five of the responders reported having three or more experiences from a pool of 826 participants. The results highlight that West Africans are exposed to many experiences due to adverse issues such as war, sexual abuse, violence and emotional neglect (Ogunkua et al., 2019). Children who live through these experiences would benefit from counseling interventions to regulate socio-emotional learning and reduce other mental health issues, that can come from these traumatic experiences such as alcoholism, substance abuse, and other risky behaviors (Kabiru et al., 2010).

Counseling in indigenous communities, such as West Africa, requires the acknowledgment that modern practices are not easily accepted within the community (Levers et al., 2011). Articles that address counseling interventions for adverse childhood experiences in West Africa are limited. Previous education on traumatic experiences impacting Africa's indigenous people primarily focus on South Africa (Jewkes et al., 2010), with studies pooled from people in Capetown and Johannesburg (Felitti et al., 1998). This shortage of mental health data suggests that insight for this sub-group of people is needed; therefore, summoning the necessity for this article.

METHODOLOGY

The primary role of a systematic review of the literature is to identify and examine the available research for specific research queries. Research is inspected using a protocol for retrieval and reliability which respond to the scope of the study. It is important to have knowledge of indigenous cultures when conducting research in another country. All of the researchers in this article identify as African American. The research team discussed cultural implications and potential differences in cultures to reduce bias.

The research questions should be identified before completing the search, as it impacts the entire process for the systematic review (Wheeler and Richards, 2007). The point of this qualitative study is to introduce a compact diagram of the current writing to respond to the lack of information on techniques and interventions used for West Africa's school-aged children with adverse childhood experiences. These interventions will include components highlighting the mental, physical, and spiritual component of wellness as it applies to the acknowledged population.

The systematic review conducted by the researchers in this analysis focuses literature from January 2005 to June 2020 related to adverse experiences and children. The purpose was to examine the adverse experiences that children in West Africa endure and to understand interventions that are used in therapeutic efforts to alleviate the effects of those experiences.

Adverse experiences can be defined as traumatic exposures to abuse, violence, dysfunction (Kimple and Kansagra, 2018). Using a three-phase methodology of a key term search, filtering by date relevance of January 2005 to June 2020, and content screen review, the researchers were able to gather data that highlighted adverse experiences and interventions that were either used in the literature or suggested for the West African population, including children, for addressing mental health symptoms.

Qualitative research has historically been chosen as the preferred research method to recount phenomenological perspectives, interpret behavior, and understand cross-cultural information (Lazaraton and Taylor, 2007; Rahman, 2017). Rather than quantitative investigations of viability, which plan to assess results regarding outcomes, a qualitative approach offers a more in-depth perspective from the participant. Qualitative research provides a subjective examination that does not rely on the researcher for data; therefore, using a subjective examination supports this study in identifying best practices for children and adolescents in West Africa. Our investigation about clinical practices used with West African people, provided minimal perspective and no formal model for treatment; therefore, a subjective examination into the perspective of treatment by children, adolescents, and families was completed. The information identified through qualitative review may foster implications for improved care. The key aim of this systematic analysis is to determine the efficacy of interventions for children in West Africa who have encountered adverse conditions during their childhood.

Database Searches

There was a review of five computer databases: Proquest, PsychInfo, Scopus, Wiley, and Springer. These databases were searched online using a university sponsored search engine and can be found in **Table 1** of this article. The database selection remained limited to these search database due to restriction in application. The searches included key terms to filter down the articles to keep the most relevant and appropriate articles for review. Beginning the search at African counseling techniques (interventions), West Africa, children, adverse experiences, qualitative, restricted dates for articles from January 2005 to June 2020 and excluded any results that were not from peer reviewed journals. In reviewing this time frame, we are able to see the influx on mental health articles over a range of time impacted by political changes and discovery in mental health. In applying this methodology there were challenges with initial searches due to lack of results in searching West Africa generally. To accurately search for articles that apply to West Africa, the researchers also searched the articles by each individual country that represents West Africa. These were identified by the Encyclopedia Britannica as the countries of Benin, Burkina Faso, Cameroon, Cabo Verde, Chad, Cote d'Ivoire, Guinea, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo (Britannica, 2019).

TABLE 1 | Database search results.

	Psychinfo (2005–2020)	Proquest (2005–2020)	Springer (2005–2020)	Wiley (2005–2020)	Scopus (2005–2020)	Total
			Citations of key term per database			
African counseling techniques	413	318	2,542	23,781	1,606	28,978
Western Africa	5	97	2,542	1,838	19	4,498
Children	3	–	2,046	1,090	10	3149
Adverse experiences		–	675	570	–	1,245
Total	3	97	675	27,279	1635	29,689

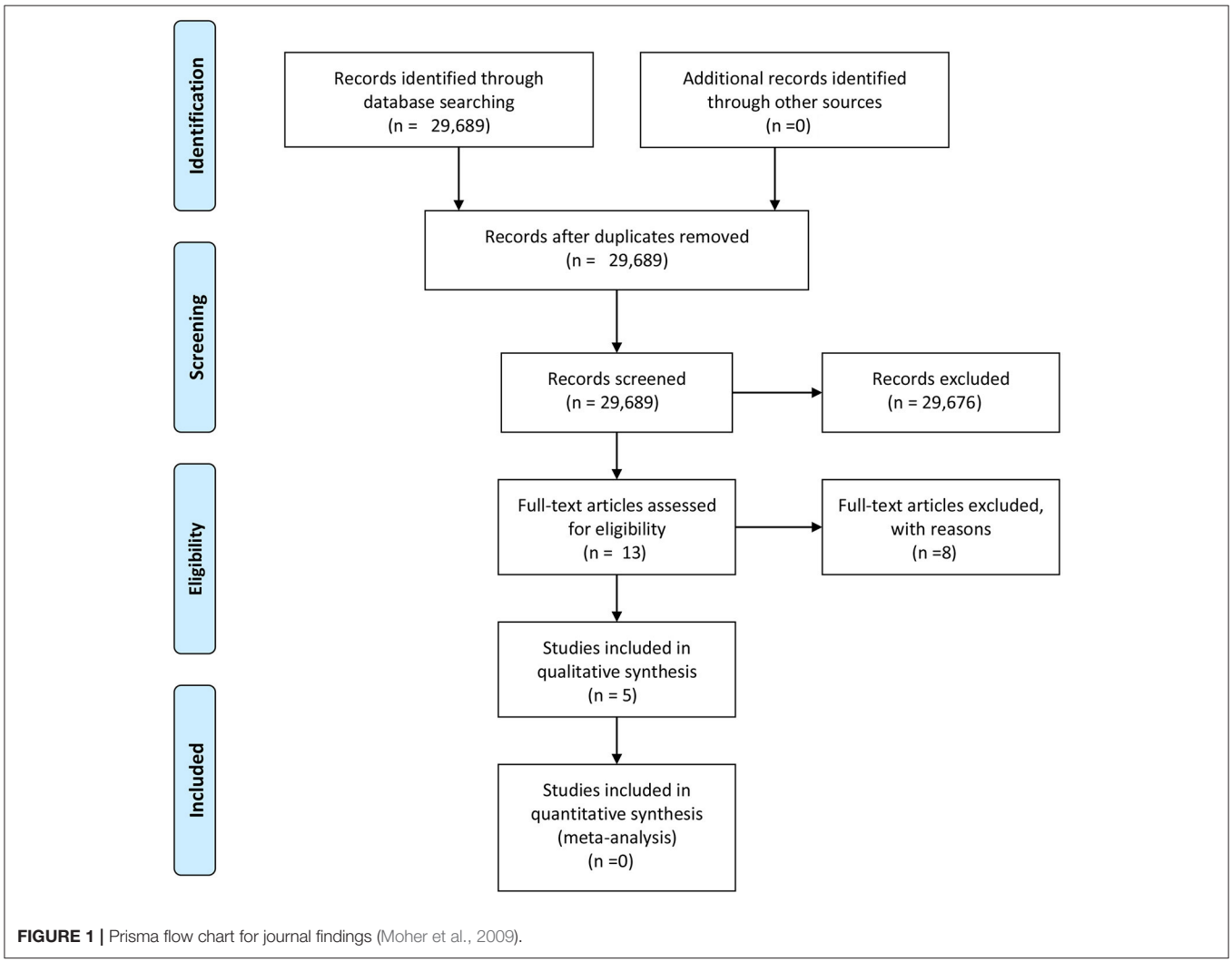


FIGURE 1 | Prisma flow chart for journal findings (Moher et al., 2009).

RESULTS

The researchers restricted the search to qualitative studies and date ranges of January 2005 to June 2020, to support the systematic review needed to assess the current state of interventions related to adverse experiences with West Africa's children. Following this algorithm 29,689 articles were identified as presented in **Figure 1** of the PRISMA flow diagram (Moher et al., 2009). Thirteen articles were assessed for eligibility in terms of focus on children and families with children, leaving eight articles to be removed. After filtering the articles for desired population, appropriateness, qualitative factors, removing abstracts, keeping articles focused on psychology and child and family studies, the result was five articles that were used to explain interventions. Descriptive characteristics of the articles are in **Table 2**. Following the article extraction and analysis it was found that the research suggests interventions of use clinically within the West African culture that focus on themes

TABLE 2 | Five journal articles selected between 2005 and 2020 included in systematic review.

Author(s)	Year	Title	Discipline	Journal	Interventions and Themes
Lo and Dzokoto	2005	Talking to the master: Intersections of religion, culture, and counseling in Taiwan and Ghana	Clinical Mental Health	Journal of Mental Health Counseling	Western-style psychotherapy, public health education, religious mentoring, The Ideal Master Approach Themes: Western Psychotherapy, Spirituality, Culture
Stepakoff et al.	2006	Trauma Healing in Refugee Camps in Guinea: A Psychosocial Program for Liberian and Sierra Leonean Survivors of Torture and War	Psychology	The American Psychologist	Stage-oriented model of trauma recovery (psychodynamic, relational/interpersonal, cognitive–behavioral, narrative, and expressive/humanistic psychotherapies), affect-laden experiences in words or other symbolic forms (e.g., drawings, drama, songs). Themes: Western Psychotherapy, Expressive Arts
Weine	2011	Developing preventive mental health interventions for refugee families in resettlement	Family Studies/Psychology	Family Process	Resilience approach, community collaboration, Mixed Methods With Epidemiology, and Focused Ethnography Preventative mental health interventions (Feasibility, Acceptability, Culturally Tailored, Multilevel, Time Focused, Prosaicness, Effectiveness, and Adaptability) Social Support, Peer Groups Themes: Western Psychotherapy
Asagba	2015	Developing logotherapeutic strategies as effective interventions for victims of sexual assault	Psychology	Gender and Behavior	Frankl mountain range, Long's logotherapeutic transcendent crisis intervention 3-step model as logohint or logohooks for managing of the sexual assault victims Themes: Expressive Arts
Ebigbo et al.	2017	Cross cutting issues in the practice of psychotherapy in Nigeria	Clinical Psychology	Journal of Contemporary Psychotherapy	Prayer houses, traditional healers, Harmony Restoration Therapy and Meseron treatment frameworks, cosmogram. Wawa-Technique, Culture Centered Psychotherapy Themes: Spirituality, Culture

surrounding spirituality, culture, expressive arts, and Western approaches to psychotherapy.

Spiritual

The introduction of modern counseling practices for indigenous communities requires cultural competency and knowledge of their world view. Traditional African culture emphasizes great respect for and wisdom in their community leaders such as village chiefs, elders, traditional healers, and ancestors. It is to them that one goes for guidance, direction, and atonement; therefore, these are their "counselors" (Levers et al., 2011). Although many of the interventions practiced by traditional healers may not be applicable to children, children and adolescents are influenced by these healers due to the nature and culture of their environment and influence on the family (Lo and Dzokoto, 2005). The extracted articles identify the importance of indigenous psychological practices from a spiritual and creative lens.

Two of the extracted articles indicated that spirituality was a preferred counseling intervention for children in West Africa who have had adverse childhood experiences. Ebigbo et al. (2017) qualitative study acknowledges the importance of spirits—use of traditional healers—and prayer houses as interventions for therapy. The spirits provide a sense of consciousness and guidance of morally accepted ideals. The prayer houses are a popular place to reduce stress and identify aspects of hope in times of adversity. Prayers serve as meditation and instant gratification because those who appear at these prayer houses serve as each other's support with the guidance of a priest. This act is like group counseling with a facilitator. Traditional healers are the preferred facilitators of these healing groups fostered in the prayer houses.

Ebigbo's Harmony Restoration Therapy acknowledges the importance of spirituality in the healing techniques of the Igbo people by identifying the need for mending and healing amongst one's own self and one's relationships with others (Ebigbo et al., 2017).

A qualitative study by Lo and Dzokoto (2005), recognized the importance of acknowledging spirituality and the balance of technique as it applies to counseling. This study provides implications of interventions used with Ghanaian clients with the counseling framework of the approach of the Ideal Master (IM). Approaches used by the Ideal Master identify ways to manage stress through reduction of anxiety, positive self-talk, and prayer, and are unified to eliminate cognitive distortion due to traumatic experiences, such as genital shrinking (Lo and Dzokoto, 2005).

Culture

The foundation of African society includes the identity of the family and community.

People are viewed as a section of their natural setting and are closely meshed in the practices and beliefs through experience and education from family (Kamya, 1997). The incorporation of culture into the application of treatment interventions for West Africa's community members, including children, creates an experience that is unique to individuals within a regional area. As previously mentioned the Ideal Master not only uses spirituality but culture as well to facilitate interventions. The Ideal Master (IM) is a counselor who is knowledgeable and aware of cultural values, religious beliefs, and Western Counseling theories (Lo and Dzokoto, 2005). They are able to process the importance of culture and religion in the worldview of the client. IMs integrate all three previously mentioned factors to understand and encourage mental health wellness. IM is not easily achieved in practice, as incorporating cultural and spiritual factors with Western trained counselors may be a difficult task for more native clients (Lo and Dzokoto, 2005). Western trained counselors should be aware of the cultural and spiritual norms in the client's native community. In understanding the norms, this assists the counselor in processing problems and developing conceptualizations more effectively and appropriately. Counselors should also know how a client engages in cultural and spiritual practices as it applies to their life. Counselors should consult where appropriate to increase their cultural and religious knowledge (Lo and Dzokoto, 2005). Lastly, IM counselors should be considerate of the various social identities a client may have in avoiding generalization based upon one factor of their identity. Differences in history and personality as well as sexual orientation, physical ability, gender, socio-economic status, and age contribute to individuals' experiences and should be considerations in assessment and intervention development and application (Lo and Dzokoto, 2005).

Other interventions steeped in culture include culture centered psychotherapy in the form of Harmony Restoration Therapy, Meseron treatment frameworks, cosmogram, and the Wawa Technique (Ebigbo et al., 2017). Human Restoration Therapy (HRT), is based on African culture and used in Nigeria. It is the concept of belief in supernatural forces, expectations of supernatural punishment, belief in symbols, tribal legends and mythological concepts, affective activity in everyday life, identification with cultural group, decreased ego boundaries, ancestor worship, belief in dream life as a reality, belief in idealized good objects, use of symbols and grand religious belief (Ebigbo et al., 2017). HRT focuses on the relationship between humans, spirits, gods, and the Almighty God as a part of the sanity of Africans. It is a holistic view that incorporates ancestors, spirits and nature and focuses on the relationships that an individual has with these entities. If there is discourse in those relationships the wellness and health will not be well for the person until the relationships are mended (Ebigbo et al., 2017). Harmony Restoration Theory acknowledges that there is a mind, body, society, psychosocial, and environmental thread that is culture based and innate to West Africans, enabling them to reach beyond their individual selves.

Meseron Therapy is a psychotherapeutic method that is native to Nigeria based on the language and culture of Nigerians. Maseron equates to "I refuse." It focuses on the assumptions that an individual's decisions hold consequences that are inevitable, as well as that individuals have the capacity to change their condition by working on themselves (Awaritefe, 1995). In Meseron treatment an individual detaches themselves from negativity and actively embraces and surrounds themselves with positive things (Ebigbo et al., 2017). In Meseron, the therapist assists the client in moving to a place that promotes the strength to refuse actions and be self-motivated and determined to overcome their illness. The goal is to encourage the awakening of the client to think about their situation, use mobilization of their resources to change their situation, and assist in symptom relief or termination of the unwanted condition of the client (Ebigbo et al., 2017).

Cosmograms are used in therapy to create interview maps of the areas of important relationships and to display the levels of harmony or disharmony within them (Ebigbo et al., 2017). With the purpose of restoration, a cosmogram maps out all the relationships that are important to the individual. Using detailed psychological exploration that focuses on the sources of belief systems and usual relationships in West Africa, such as immediate and extended family, a cosmogram illustrates the client's belief systems and any discourse within the relationships (Ebigbo et al., 2017). These are used to discover the functional and non-functional relationships and how they relate to each other, understand if there are any breaches of promises or oaths within the relationships as well as identifying successes and failures. Tangible components of the client's life that are of value are also explored. In evaluating these components of the client's life the client should have a fair understanding of the relationships that interact with their life and encourage the family to process their relationships (Ebigbo and Onuora, 1987). This is usually observed by a Harmony Restoration Therapist to protect from superstitious, exploitative religious and traditional healers (Ebigbo et al., 2017). The Harmony Restoration Measurement Scale is used as an objective psychometric measure of the cosmos and can be used interchangeably with the cosmogram (Ebigbo et al., 2010).

Lastly the Wawa Technique, also derived from Nigerian culture, prompts the client to say Wa (no) to an issue that is against moral order or the well-being of the individual (Ebigbo et al., 1997). It is used to build willpower in clients to refuse something that is against moral order and demonstrates wisdom and good cultural orientation. Proverbs are also used to help to establish moral order and are grounded in cultural, traditional, and religious beliefs (Ebigbo et al., 2017).

The goal of the Wawa Technique is to make the client cognizant and detest the consequences of poor behavior, problematic thinking, or depression that is coupled by external pressures. It can also be used in combination with a behavior chart to monitor adherence in treatment (Ebigbo et al., 2012).

Expressive Arts

Two studies identified interventions that included artistic expression as best practices for counseling West African children. Narration and storytelling are recognized in the qualitative study by Asagba (2015) using Long's logotherapeutic intervention 3-step model. The storytelling aspect of this model provides hope and promise to sexual assault victims through the identification of rebirth using symbols such as butterflies. This article also provides other expressive art therapeutic forms such as Frankls Mountain, which identifies the challenges they have come to face due to their assault and encourages forgiveness as a tool to heal (Asagba, 2015).

A study by Stepakoff (2016), evaluates trauma-informed practices for those West African survivors of torture and war. The stage-model of trauma and recovery includes a wide range of affect-laden experiences that encourage expressive arts as a technique to healing. Use of symbolism in forms of drawing, drama, song, and other forms of communicative habits encourages resilience and hope. Children who have endured traumatic experiences through torture such as mutilation and witnessing of killings, use these therapeutic methods to provide them a voice to speak without consequences. The countenance of the client requires the rapport to be built with the counselor, and trust established to promote the freedom to process through expression (Stepakoff, 2016).

Western Psychotherapeutic Approaches

Western approaches to psychological treatment are being used in West Africa. Lo and Dzokoto (2005), suggested that it is important to critically examine the use of western interventions due to their rise in popularity and use. In their examination, Lo and Dzokoto (2005), the use of western style interventions and the appropriate nature of these counseling methods in non-western countries was explored for cultural sensitivity and best practice. A common approach between Ghana and the United States is the use of talk therapy. Both countries use psychiatrists and psychologists. Clients receive treatment based on a mental health diagnosis and can seek both inpatient and outpatient support. However, there are significant cultural differences in the use of western approaches to treatment. In Ghana, the psychologist is perceived to be more of an expert on mental health than a psychiatrist due their perceived ability to better understand human behavior (Lo and Dzokoto, 2005).

The use of mental health counseling is not limited to only psychiatrists and psychologists in Ghana. Similar to western approaches to community counseling, they also have school counselors, religious counselors, and public health educators (Lo and Dzokoto, 2005). Similar to the United States (U.S.), counseling services are becoming more socially acceptable in Ghana. An integrative approach is used to allow services to work together for a preventive approach to mental health. In contrast to the United States, Ghana has remained true to their culture by using traditional healers to support mental health (Lo and Dzokoto, 2005). Although this is a difference in approach, the use of multiculturalism is becoming more important in the U.S. and around the world to provide a more holistic approach to mental health treatment.

In 2005 the Center for Victims of Torture concluded their support and mental health treatment for Liberian and Sierra Leonian survivors of civil war (Stepakoff et al., 2006). The quest was identified as the Guinea project. A stage-oriented model of trauma recovery was used to guide their treatment. Trauma specialist and American psychiatrist, Dr. Judith Herman's trauma approach provided the most influence of the model (Herman, 2015). The three phases of her model are safety and stabilization, processing traumatic memories, and the process of resolution and recovery (Herman, 2015). The treatment team used approaches that are like community and group counseling in western approaches of mental health treatment. The results indicated a decrease in trauma symptoms for participants and an increase of positive daily function and use of social support. The team provided counseling to over 4,000 clients and provided support to at least 15,000 people by delivering supportive services (Stepakoff et al., 2006).

The Guinea team's initial objective was to establish trust and to promote safety. This was initiated by providing the nature and limitations of their treatment. This is parallel to providing consent of treatment. Clients were encouraged to establish ground rules and expectations. Confidentiality and respect were promoted among the group members and the team. Group members were encouraged to get to know about other group members. This initial stage of treatment is very similar to western approaches; however, there are some significant differences that the Guinea team promoted to establish safety among group members. Group members were encouraged to spend time together outside of the group sessions. In addition, group members were not encouraged to share their trauma story at the beginning of treatment. Clients were encouraged to share what their lives were like before they experienced the trauma of war (Stepakoff et al., 2006).

Cognitive therapy is another western approach that was consistently used in this treatment. The team noticed that clients struggled with negative self-talk and made negative statements that were not accurate in accordance to reality. Positive self-talk and positive reframes were encouraged in a cultural manner. The team encouraged group members to practice positive self-talk within the group along with facilitators. They noticed that their approach to positive self-talk represented cultural significance for the clients. Ultimately clients of various ages expressed appreciation for the services provided (Stepakoff et al., 2006).

DISCUSSION

In reviewing counseling interventions best appropriate for children and adolescents of West African descent, exploration of best practices is still a necessity. In the five articles included in this manuscript, children and adolescents' counseling interventions were identified for treatment of various mental health illness specific to West African culture and experiences.

While examining existing data on counseling techniques used with children, research identifying traditional healers and

spiritual practices were reported to be used to cast out demonic behaviors or witchcraft (Yoder et al., 2016). The presence of the traditional healers is limited in the literature and does not elaborate on their role as a holistic healer for mental health. When discussing spirituality, both the Ebigbo et al. (2017) article and the Lo and Dzokoto (2005) article highlighted the presence of a spiritual leader such as a priest, Ideal Master or traditional healer to help the client with stress and anxiety reduction, and prayer to assist in reducing the experiences of trauma. The Ideal Master is also mentioned by Lo and Dzokoto (2005) regarding cultural related interventions. The Lo and Dzokoto (2005) article discusses the inclusion of cultural values in delivering spiritual and western approaches and interventions to clients. Increased knowledge of culture and its life application for the client increases processing of problems and conceptualizations with more context and accuracy (Lo and Dzokoto, 2005). During the review of the Ideal Masters as a cultural intervention tool, other cultural interventions such as Harmony Restoration Therapy, Meseron Treatment, cosmograms, and the Wawa Technique are also identified in the Ebigbo et al. (2017) article. These interventions align with elements of West African culture. Cultural interventions that include the value of relationships, symbols, and language create opportunities to address adversities in a connecting experience that emphasizes shared practices and belief. For expressive arts, two articles found produced interventions that use oral communication and symbolism for healing. Counselors working with clients who have experienced traumatic experiences such as sexual abuse or physical abuse may use expressive arts in their sessions. Research from older journals avoid discussion of traditional techniques to therapy due to holistic beliefs regarding healing. Techniques that incorporate holistic practices through creative skill and application are neglected such as expressive arts (Bulus, 1989). Asagba (2015) discusses the use of storytelling through symbolism to identify challenges and encourage forgiveness and rebirth, and Stepakoff et al. (2006) uses symbolism in the form of song, drawings and other methods as a means of expression to lead toward healing—thus, there is a common thread between these two sources. Lastly, Western psychotherapeutic approaches were presented throughout the articles of Lo and Dzokoto (2005), Stepakoff et al. (2006), and Herman (2015) in an integrated approach to understanding the experience of West African families and children. Interventions delivered to West African communities such as stage-oriented model of recovery, trauma recovery, and group counseling incorporated culture appropriation. Health professionals such as psychologists, traditional healers, religious and school counselors, and health educators are encouraged to use this approach.

There is growing research and literature on western approaches to mental health in West Africa; however, there is limited research concerning specific interventions and experiences with children. Findings on counseling practices were more prevalent in other parts of the continent such as South Africa (Myers et al., 2019); therefore, review of practices in West Africa was deemed to be important for this manuscript. The articles presented a community counseling approach to treatment. Talk therapy, group counseling, consent, confidentiality, cognitive therapy, and multiculturalism, are all themes that were identified that are like western styles of treatment. However, culture and spirituality are the primary differences that separate how treatment is uniquely presented and received in West Africa. In reference to culture, human behavior is valued at a high level; therefore, the psychologist is viewed as more of an expert than is a psychiatrist, who may offer a more medically based approach. In reference to spirituality, traditional healers are still viewed as a source of support for mental health.

CONCLUSION

Political instability, war violence, terrorism, chronic illness, and abuse are themes that were identified in the reviewed articles as adverse child experiences that place children at a high risk for mental health needs in West Africa. The trauma associated with these situations is treated from a mixture of spiritual, cultural, expressive arts, and western style approaches that are related to the culture of the region.

IMPLICATIONS FOR FUTURE RESEARCH

Mental health awareness and the need for support of children concerning mental health are growing in West Africa. A gap in research that was revealed in the review of these articles was the lack of psychotherapeutic interventions designed specifically for children. The research suggested that children are being exposed to adverse childhood experiences and severe trauma; however, there does not appear to be a universal approach or agreement regarding best practices for children. This gap in research can serve as an opportunity to further explore specific interventions tailored to the needs of children in West Africa and to establish best practices for mental health interventions in the region.

AUTHOR CONTRIBUTIONS

SC completed abstract, designed the model and the computational framework, and analyzed the data. SC, CJ, and QS wrote the manuscript and carried out the implementation of the search and study.

REFERENCES

Asagba, R. B. (2015). Developing logotherapeutic strategies as effective interventions for victims of sexual assault. *Gender Behav.* 13, 6795–6802.

Awaritefe, A. (1995). *Meseron Therapy: The Practice of Psychotherapy in Africa*. Enugu: Chukka.

Britannica, E. (2019) Western Africa. *In Encyclopaedia Britannica*. Retrieved from: https://www.britannica.com/place/western-Africa/The-wider-influence-of-the-Sudanic-kingdoms (accessed June 12, 2020).

Bulus, I. (1989). Towards a traditional model for school counselling and care in Nigeria. *Int. J. Adv. Counsell.* 12, 105–112. doi: 10.1007/BF00117208

Ebigbo, P. O., Elekwachi, C. L., John, E. E., Nweze, F. C., and Innocent, C. U. (2010). Development of the harmony restoration measurement scale (Cosmogram) Part 1. *Niger. J. Clin. Psychol.* 8, 25–49.

Ebigbo, P. O., Elekwachi, C. L., and Nweze, F. C. (2012). Challenges in the treatment of drug abuse in a Nigerian health worker: a case study applying the WaWa technique. *J. Contemp. Psychother.* 42, 257–264. doi: 10.1007/s10879-012-9213-9

Ebigbo, P. O., Elekwachi, C. L., and Nweze, F. C. (2017). Cross cutting issues in the practice of psychotherapy in Nigeria. *J. Contemp. Psychother*. 47, 75–86. doi: 10.1007/s10879-016-9356-1

Ebigbo, P. O., Oluka, J. G., Udeoke, B., and Okwaraji, F. (1997). Wawa Technique in Harmony Restoration Therapy: An African psychiatric perspective. *Medikka Int. J. Univ. Niger. Med. Stud.* 5, 5–11.

Ebigbo, P. O., and Onuora, A. N. (1987). A model of understanding and treatment of paranoia in Nigeria. *Psychosom. Med. Psychoanal.* 38, 78–90.

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., et al. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the adverse childhood experiences (ACE) study. *Am. J. Prev. Med*. 14, 245–258. doi: 10.1016/S0749-3797(98)00017-8

Herman, J. L. (2015). *Trauma and Recovery: The Aftermath of Violence–From Domestic Abuse to Political Terror*. Hachette UK; New York, NY.

Herzog, J. I., and Schmahl, C. (2018). Adverse childhood experiences and the consequences on neurobiological, psychosocial, and somatic conditions across the lifespan. *Front. psychiatry* 9:420. doi: 10.3389/fpsyt.2018.00420

Jewkes, R. K., Dunkle, K., Nduna, M., Jama, P. N., and Puren, A. (2010). Associations between childhood adversity and depression, substance abuse and HIV and HSV2 incident infections in rural South African youth. *Child Abuse Negl.* 34, 833–841. doi: 10.1016/j.chiabu.2010.05.002

Kabiru, C. W., Beguy, D., Crichton, J., and Ezeh, A. C. (2010). Self-reported drunkenness among adolescents in four sub-Saharan African countries: associations with adverse childhood experiences. *Child Adolesc. Psychiatry Ment. Health* 4:17. doi: 10.1186/1753-2000-4-17

Kamya, H. A. (1997). African immigrants in the United States: the challenge for research and practice. *Soc. Work* 42, 154–165. doi: 10.1093/sw/42.2.154

Kimple, K. S., and Kansagra, S. M. (2018). Responding to adverse childhood experiences it takes a village. *N. C. Med. J.* 79, 95–98. doi: 10.18043/ncm.79.2.95

Lazaraton, A., and Taylor, L. (2007). "Qualitative research methods in language test development and validation," in *Language Testing Reconsidered* (Ottawa, ON: University of Ottawa Press), 113–129. doi: 10.2307/j.ctt1ckpccf.12

Levers, L. L., May, M., and Vogel, G. (2011). "Research on counseling in African settings," in *Counseling People of African Ancestry,* ed E. Mpofu (Cambridge, MA: Cambridge University Press), 57–74. doi: 10.1017/CBO9780511977350.007

Lo, H. W., and Dzokoto, V. (2005). Talking to the master: intersections of religion, culture, and counseling in Taiwan and Ghana. *J. Ment. Health Counsel.* 27, 117–128. doi: 10.17744/mehc.27.2.gx7d7thlvgkju4pd

Moher, D., Liberati, A., Tezlaff, J., Altman, D. G., and PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med* 6:e1000097. doi: 10.1371/journal.pmed.1000097

Myers, B., Carney, T., Browne, F. A., and Wechsberg, W. M. (2019). A trauma-informed substance use and sexual risk reduction intervention for young South African women: a mixed-methods feasibility study. *BMJ Open* 9:e024776. doi: 10.1136/bmjopen-2018-024776

Ogunkua,B., Okunkua, L., Ricard-Pognon,P., and Ofoche,U. (2019). "ACE surveillance study of teachers and administrators in public and private schools in Southwest Nigeria, West Africa," in *Paper presented at the Child Trauma Conference* (Lagos).

Rahman, M. S. (2017). The advantages and disadvantages of using qualitative and quantitative approaches and methods in language "Testing and Assessment" research: a literature review. *J. Educ. Learn.* 6, 102–112. doi: 10.5539/jel.v6n1p102

Stepakoff, S. (2016). The healing power of symbolization in the aftermath of massive war atrocities: examples from liberian and sierra leonean survivors - shanee stepakoff, 2007. *J. Humanist. Psychol.* 47, 400–412. doi: 10.1177/0022167807301787

Stepakoff, S., Hubbard, J., Katoh, M., Falk, E., Mikulu, J. B., Nkhoma, P., et al. (2006). Trauma healing in refugee camps in guinea: a psychosocial program for liberian and sierra leonean survivors of torture and war. *Am. Psychol.* 61, 921–932. doi: 10.1037/0003-066X.61.8.921

Wheeler, S., and Richards, K. (2007). The impact of clinical supervision on counsellors and therapists, their practice and their clients. A systematic review of the literature. *Counsell. Psychother. Res.* 7, 54–65. doi: 10.1080/14733140601185274

Yoder, H., Tol, W. A., Reis, R., and Joop, T. V. M., de,Jong. (2016). Child mental health in sierra leone: a survey and exploratory qualitative study. *Int. J. Ment. Health Syst*. 10:48. doi: 10.1186/s13033-016-0080-8

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

frontiers in Public Health

ORIGINAL RESEARCH
published: 26 July 2021
doi: 10.3389/fpubh.2021.583667

Intra-household Variation in Pathways to Care for Epilepsy and Mental Disorders in Eastern Uganda

Nandini D. P. Sarkar[1,2,3], Azucena Bardaji[3], Florence K. Baingana[4], Joan Muela Rivera[5,6], Bart Criel[1], Joske Bunders-Aelen[2] and Koen Peeters Grietens[1]*

[1] Department of Public Health, Institute of Tropical Medicine, Antwerp, Belgium, [2] Athena Institute for Research on Innovation and Communication in Health and Life Sciences, Faculty of Sciences, Vrije Universiteit Amsterdam, Amsterdam, Netherlands, [3] ISGlobal, Hospital Clinic – University of Barcelona, Barcelona, Spain, [4] School of Public Health, College of Health Sciences, Makerere University, Kampala, Uganda, [5] PASS Suisse, Neuchatel, Switzerland, [6] Medical Anthropology Research Centre (MARC) at Departament d'Antropologia, Filosofia i Treball Social, Universidad Rovira i Virgili, Tarragona, Spain

Integrating mental, neurological, and substance use (MNS) health care into the public health system has become a global priority, with mental health, and well-being now being part of the Sustainable Development Goals. In the aim to provide good quality care for MNS disorders, understanding patients' pathways to care is key. This qualitative study explores the pathways to care of patients attending an outpatient mental health clinic of a district hospital in eastern rural Uganda, from the perspectives of their caregivers. Twenty seven in-depth interviews were conducted with caregivers of MNS patients visiting the clinic, with a focus on four case-presentations. Data analysis consisted of thematic and emergent content analyses using NVivo 11. Results across all interviews highlight that chosen help-seeking itineraries were largely pluralistic, combining and alternating between traditional healing practices, and biomedical care, regardless of the specific MNS disorder. Intra-household differences in care seeking pathways—e.g., where one patient received traditional help or no care at all, while the other received biomedical care—depended on caregivers' perceived contextual illness narrative for each patient, in combination with a variety of other factors. If interpreted as a form of bewitchment, traditional medicine and healing was often the first form of care sought, while the mental health clinic was seen as a recourse to "free" care. Patients, especially younger children, who showed visible improvements once stabilized on psychotropic medication was a source of motivation for caregivers to continue with biomedical care at the mental health clinic. However, stock-outs of the free psychotropic medication at the clinic led to dissatisfaction with services due to out-of-pocket expenses and precipitated returning to alternative therapy choices. This article showcases the importance of understanding the complex and varied combinations of individual, cultural, socioeconomic and structural factors that may affect caregivers' choices of pathways to care for patients with MNS disorders in eastern rural Uganda. These cumulative complex processes and context-specific help-seeking behaviors, which ultimately impact patient treatment and MNS health outcomes, need to be first acknowledged, understood and taken into account if we are to promote more inclusive, effective and integrated public mental health systems globally.

Keywords: Uganda, low middle income country, qualitative research, epilepsy, mental health, pathways to care, help-seeking behavior, caregivers

OPEN ACCESS

Edited by:
Lynne Sanford Koester, University of Montana, United States

Reviewed by:
Brad Kolls, Duke University, United States
Marcella Chiromo, Multnomah University, United States

****Correspondence:***
Nandini D. P. Sarkar
nsarkar@itg.be

Specialty section:
This article was submitted to Public Mental Health, a section of the journal Frontiers in Public Health

Received: *15 July 2020*
Accepted: *14 June 2021*
Published: *26 July 2021*

Citation:
Sarkar NDP, Bardaji A, Baingana FK, Rivera JM, Criel B, Bunders-Aelen J and Grietens KP (2021) Intra-household Variation in Pathways to Care for Epilepsy and Mental Disorders in Eastern Uganda. Front. Public Health 9:583667. doi: 10.3389/fpubh.2021.583667

INTRODUCTION

> "*It used to work like demons. She became ill and [had] headaches and walked aimlessly, like demons… She would fall down and do inappropriate things… we would take her to the traditional healers … we tried the medical doctors … then we decided to use those tablets… and whenever she swallowed them, she couldn't fall down.*"—Caregiver SN023.

Mental, neurological, and substance use (MNS) disorders are among the leading causes of long-term disability and debilitation globally, accounting for 7.4–13% of disability-adjusted life-years (1, 2). On average, ∼1 in 5 people experience a common mental disorder in any given 12 month period (3), while current estimates indicate that 14.3% of deaths are related to mental disorders globally (4). Epilepsy, a neurological disorder, had a global age-standardized prevalence of 621.5/100,000 population in 2016, with the highest prevalence in eastern, western, and southern sub-Saharan Africa regions, central Asia, central and Andean Latin America, and southeast Asia (5). As such epilepsy is considered a major public health problem in sub-Saharan Africa, and ∼60% of persons living with epilepsy do not receive biomedical anti-epilepsy treatment (6). While low- and middle-income countries carry a significant amount of the disease burden from MNS disorders, their resource-constrained mental health systems continue to face large treatment gaps and shortages (1, 7).

Uganda, a low-income country in East Africa, has taken significant steps toward developing a national mental health policy in the last decade (8–10). Nevertheless, significant challenges remain in ensuring adequate integration of biomedical MNS health care into the decentralized Ugandan primary health care system (11). Human and financial resource constraints are primary barriers in ensuring equitable coverage at the local health system level (12). In general, the coverage, access to and quality of MNS services remains low, and are in part associated to socio-cultural and systemic barriers (13, 14).

Additionally, alternative systems of care may compete with the limited biomedical care available for MNS disorders through the public health system within these contexts. It has been hard to estimate the exact numbers of traditional healers in the Ugandan context, despite the government urging their registration and indexation (15). There is also a known vast diversity in traditional providers ranging from herbalists to diviners, faith healers, spirit mediums, and so on. As such, traditional care and its utilization has been documented for a wide variety of biomedical and psychosocial health concerns, including but not limited to HIV, malaria, diabetes, perinatal depression, spirit possession, and severe mental illness (16–22).

Regardless of the pathways of care of those living with MNS disorders, it is important to recognize that persons with MNS disorders require some degree of caregiving. While it is known that MNS disorders often extol a significant burden and associated cost on both patients and their caregivers (23, 24), there is limited data on caregiver perceptions toward the illness experience, their motivations, and choice of therapeutic itineraries. The few studies on caregivers in Uganda, focus on caregivers of children living with HIV/AIDS, and how caregivers can be supported (25–27); or the lived experiences of caregivers with patients living with MNS disorders and how specific interventions can support them (28, 29). Only one recent study specifically explores help-seeking processes amongst the parents of children with MNS disorders, which highlights a mixture of traditional, environmental, and biomedical understandings as underlying causes of illness that influence chosen pathways to care (30).

As such, there is value in evaluating MNS needs from caregiver perspectives. Theoretical models for conceptualizing and understanding health seeking behavior—, such as the Health Belief Model (31, 32), the PASS-model (33), and other anthropological and socio-cognitive models—can be useful tools in this regard. While normally used to situate patient perspectives, these frameworks can also be employed to understand and evaluate MNS-related service utilization, not only from the perspectives of service users, but their caregivers as well (34).

Additionally, in contexts where decision-making processes are highly dependent on the culture and surrounding social system, it would be highly relevant to take into account the role of the therapy management group (that is, those individuals who perform and partake in joint caregiving responsibilities of a patient), social support systems, social values, and social pressures (35). These factors, in combination with barriers in quality of, and access to, care and resource seeking, create deeply intertwined decision-making spaces that can be relevant to caregiver experiences, and coping strategies. To improve access to and utilization of publicly available MNS care in resource-constrained settings, it can therein be crucial to understand the decision-making processes of caregivers of persons with MNS disorders.

Thus, the aims of this study were: (a) to explore beliefs and attitudes of caregivers of persons with MNS disorders regarding their patient's particular MNS concern; (b) to understand the role of socio-cultural and socio-economic factors in caregiver decision-making; and (c) to assess caregivers' perceived quality of, and satisfaction with, available biomedical (whether pharmacological or psychological) treatment, and other available alternative pathways to care in eastern rural Uganda.

METHODS

Study Design

This article presents data from a qualitative strand of research in a larger study conducted from September 2016 to February 2017. The larger study consisted of a mixed-methods assessment of Iganga district hospital's mental health clinic (MHC) and its visiting patients and caregivers, from a quality of care perspective (Author, submitted article). This qualitative enquiry focuses on the mechanisms underlying the help-seeking related, decision-making processes of caregivers of persons with MNS disorders visiting the MHC.

Study Site and Population

The study took place across the rural district of Iganga in eastern Uganda, which is located in the Busoga sub-region. The district had an estimated total population of 504,197 inhabitants in 2014 with ∼58% of the total population under the age of 18 (36). The district can be considered representative of most Ugandan rural populations, with subsistence farming being the main source of earning and livelihood of over 60% of Busoga households (36). The primary languages spoken in the district are Lusoga, Luganda, English and Swahili, while religious affiliations include Protestants, Muslims, Catholics, faith-based, and traditional cultural beliefs (37).

The local health system in Iganga district consists of four levels of care and is illustrative of the decentralized public health system in Uganda, providing free of cost biomedical care. Iganga district has one district level general hospital in Iganga town, which is a semi-urban township. Iganga district hospital serves a catchment population of ∼1.5 million people, coming from across six neighboring districts. Within the district hospital there is the outpatient MHC, which is the first point of access to outpatient neuropsychiatric care at the district level.

According to hospital records, in the 12 month preceding the study period, the MHC had 4,613 patient contacts in total, amounting to a median of 355.5 patients per month (Author, submitted article). At the time of the study, the staff at the MHC consisted of four health workers: one psychiatric clinical officer, one psychiatric nurse, and two nursing aides.

Sampling Strategy

Our study focused on caregivers, defined as individuals who, without being paid, "look after a family member, partner or friend who needs help because of their illness, frailty, disability, a mental health problem or an addiction, and cannot cope without their support" (38). As part of the larger study, caregivers were purposively sampled among adults from the outpatient waiting area of the MHC in Iganga district hospital, who were either: (i) accompanying a patient attending the MHC, or (ii) attending the MHC on a patient's behalf. Those who consented to the larger study, first took part in an MHC consultation observation and an exit-poll survey on patient-centred care, and consultation satisfaction outcomes, respectively (Author, submitted article). From this larger set of participants, caregivers who were residents of Iganga district, were further sampled at the end of the exit-poll survey to be part of this qualitative enquiry. A total of 27 caregivers agreed to be part of the qualitative study. Those who verbally consented to be part of this qualitative study were asked to provide their contact details for future follow-up for an in-depth interview at a time and place of their choosing.

Data Collection

In-depth interviews were used for data collection, as a means to explore caregiver help-seeking itineraries that had been chosen on behalf of the MNS patients living in their care. Based on the aims of this study and the larger mixed-methods assessment of Iganga district hospital's mental health clinic (MHC) and its visiting patients and caregivers, a tentative interview guide was developed. The interview guide details can be found in the Supplementary File. The interview guide was an iterative document, flexible and amenable to change based on the responses of interviewees.

A total of 27 caregiver in-depth interviews were conducted. Prior to the interview itself, participants were given an information sheet in Lusoga and provided written informed consent. The interviews were conducted by a member of the research team, who was from Iganga and spoke the local language of Lusoga, and she has extensive experience using qualitative research methods for health-related research in this. Each interview lasted for approximately between 45 min−1 h and was conducted in the local language of Lusoga. Most interview locations were the housing compounds of the interviewees, or the fields on which they farmed at a time convenient to the interviewee. All interviews were digitally audio-recorded, transcribed verbatim, and translated into English by the interviewer.

Data Analysis

Data analysis involved retroductive analysis, which uses both inductive and deductive coding processes. The retroductive process allowed for a dialogue between both emergent data as well as theory. Thus, analysis followed an emergent theory design based on data emerging from the interviews, the analysis of which was facilitated by the use of the PASS model.

The PASS-model was developed by the Partners for Applied Social Sciences and is based on anthropological theory (33). The model facilitated the analysis of a broad array of emergent elements that guided our analysis of caregiver help-seeking itineraries and patients' access to care, as well as exploring more systemic and structural factors at play. The model organizes relevant factors into four main categories: (i) explanatory models around illness perception; (ii) decision-making and its linkage to social values; (iii) access to care and resource seeking; and lastly, (iv) medical pluralism. Adding further support to these factors and helping build the context of help-seeking processes is the inclusion of context-specific worldviews, local social structures and cultural values, and the formal and informal health systems at play.

The process of data analysis began in fact during data collection. At the end of each interview day, daily debriefing sessions were held between the qualitative interviewer and NDPS. This in-field analysis allowed for an iterative and reflexive interview process in regard to thematically exploring key concerns and emergent themes as well as reaching data saturation. Field analysis also led to the creation of a data-driven codebook related to emergent thematic concerns arising from the narratives, such as personal motivators to provide care and the emergence of intra-household variations in pathways to care for multiple patients within the same household.

Once data collection was completed, all 27 interviews were analyzed using this retroductive process. This led to the identification of four households (i.e., four interviews) of special interest due to having multiple people within the same household who required MNS-related health care, but whose caregivers reported intra-household variations in the chosen pathways to care for each person. It should be noted that while these four cases

TABLE 1 | Gender and age details of participant caregivers and related patients.

	Caregivers ($N = 27$)		Patients ($N = 27$)	
Female	19	70%	12	44%
Male	8	30%	15	56%
Age range	18–65	–	1–40	–
Median age	40	–	16	–

were analyzed in further detail to understand and explore the intra-household variations, overall analysis from all 27 interviews is the basis of the presented results. The four households of special interest are indicative of the general themes found across all 27 interviews, with the difference of having multiple members within the same household with an MNS disorder. The process of analysis was regularly checked and discussed with remaining authors to ensure consistency in the findings. NVivo 11 was used to facilitate the storage, analyses, and further coding process of all transcripts.

Ethical Considerations

Adult caregivers were informed about the study and provided initial verbal consent to be part of the qualitative study. Under-aged caregivers were not included in the study. The MHC patients themselves were not participants of this study. Prior to the interview itself, all participants were given an information sheet in Lusoga, and provided written informed consent for their participation in the interviews.

The study protocol, along with informed consent forms and tentative interview guides (including Lusoga translations), received ethical approvals from the Institutional Review Boards of the Institute of Tropical Medicine in Antwerp, Belgium; Makerere University, School of Public Health in Kampala, Uganda; and the Ugandan National Council for Science and Technology.

Vignette 1: Financial Difficulties

According to Sheila, her daughter Agnes (F, 18 years) was 16 years when she began beating up people and abusing neighbors. Initially the family sought traditional help for a while, but Sheila still doesn't know what caused Agnes' illness—"*Some people may say that they bewitched me, and some say that they put witchcraft in my child's books. We thought maybe her friends did something because she was in a private school and we thought that maybe she ate something.*"

A friend told the family about "*a doctor who advertises himself on radio station in [neighboring district].. who operates on the human skull and he is so famous.*" But this was not followed up due to continual conflicts with the neighbors who were complaining about Agnes' abusive behaviors and "*thought that the child was pretending.*" The family had to resolve the dispute by going to the village local councilman. It was only this action which prompted Sheila, to request Agnes' father to finally take Agnes to a health facility. That first time the health workers thought it was diabetes; another time they thought it was typhoid.

Finally, a friend with an ailing elderly mother informed Sheila about the MHC, to which they had been going for approximately the last 1 year (at the time of the study). Sheila doesn't like one of the health workers who works there and thinks they should be changed. However, she does like another health worker who "*explains properly and tells you what is required and tells you what to do*"; although till date she hasn't yet once taken Agnes to have a face to face appointment at the MHC. Recently, her husband is getting tired of dealing with Agnes, but Sheila says she is still motivated to care for Agnes because she is the first-born child, and "*likes studying, is intelligent and the kind of child who respects her parents*."

At the end of the interview, when we prompted to check if there was anyone else in the family who is ill or suffers from anything similar, Sheila hesitantly informs us of her son, Joseph (M, age unknown). Joseph started "*convulsing at age 6 month, and whenever he would convulse, he would become anemic,*" so for him they usually go to health centers for anemia treatment. At one point, his convulsing was thought to be (severe) malaria, for which they then sought malaria treatment. When we probe Sheila if she's ever taken Joseph to the MHC, she says "*I have thought of it… but because of lack of money, I haven't, because I thought [the girl] would get well soon so that I take [the boy], but what has brought up the delay is [the girl] not getting well.*"

RESULTS

Participant Demographics

A total of 27 in-depth interviews were conducted with the caregivers of MHC patients across Iganga district. The gender and age details of all participant caregivers and their related patients can be found in **Table 1**.

The majority of patients were children and adolescents: 19% were under age five, while 48% were between 6 and 17 years of age. The remaining third of patients were adults above the age of 18. The majority of caregivers were related to the patient (93%), female (70%), had a median age of 40, married (78%), and had primary school level of education (67%). The median household size was six persons. The majority of caregivers and the patients were Muslim, followed by Protestant, as well as being of the Busoga tribe.

Help-Seeking Narratives

During analysis, intra-household variations in pathways to care for epilepsy, and other mental disorders were identified in four of the participant caregivers. As such, these four households were further selected for presentation as case studies and are showcased in this section.

Below we present four vignettes; each from the perspective of the caregivers of the four case presentations. The vignettes consist of narrative summaries of the interviews, including key quotes from the caregivers. They reflect varied help-seeking behaviors, chosen pathways to care and rationalizations made by the caregiver for the two patients who lived within each of their households. **Vignette 1** showcases the role of financial difficulties in ensuring care for both patients within the same household. **Vignette 2** highlights the fear of the label of epilepsy, a highly stigmatized illness in this context, and its effect on help-seeking. **Vignette 3** underscores the importance of good quality interpersonal care provision and the impact it can have on a caregiver. Finally, **vignette 4** calls attention to the influence of religion on help-seeking trajectories. To protect the identity of the participants, all names used within the vignettes are pseudonyms.

Vignette 2: A Fear of "Epilepsy"

The caregiver's name is Namaganda, mother to six children (two boys and four girls); her 4th born child, Esther (F, 15 years) is the one for whom Namaganda visits the MHC. Namaganda starts by describing how initially she refused to believe Esther's friends when "*they told me that my daughter could have become mad, and I said no it can't happen.*" Even when she saw first-hand that Esther "*had fallen on the ground and her eyes couldn't blink, I thought that maybe she has become dizzy.*" But later, Namaganda calls one of her sons to ask him that "*Is this thing also attacking Esther, because Mariam got better?*" That was when we first got to know that her eldest daughter and first born, Mariam (F, 20 years), also suffers from something similar.

After this episode, Esther was initially taken to a traditional healer who said, "*these children were bewitched using a grave of a person who had epilepsy so it's that thing following up these children*." They sought traditional care for her for about 5 months, but there was no change in Esther's condition. In May 2015 Namaganda heard from a community member that there were "*certain whites in the district hospital who are treating the mental health disorder just like for your daughter.*" She enquired on it, but by then the "whites" had left [they were international researchers conducting a research study on epilepsy (39); instead, she came to know of the MHC and started attending there. However, soon after Namaganda stopped going to the MHC because "*when you hadn't gone with money, [one of the health workers] wouldn't give you medicine*." She resorted back to traditional medicine, but by September 2016 thought "*the traditional world was just wasting my money and time, so I decided to go back to [the MHC] so that I get tablets, and whenever I don't get, I buy*." By this time the previous health worker was gone, and since then a much better health worker is in charge whom she is very content with.

Mariam, Namaganda's eldest daughter and firstborn, was just 2 months old when she began to have convulsions, and the family tried to look for medications but not much treatment was found. It was only when Mariam was seven to 10 years of age, that the community members warned Namaganda to not "*neglect that daughter, because you may think it is convulsion, but when it is not convulsion, it may even result into epilepsy*." The fear of it becoming epilepsy immediately prompted Namaganda and her husband to seek care at a neighboring health facility and start taking medication. However, soon the medication ran out and they didn't get her another dosage; eventually they resorted to traditional help—"*Fortunately she recovered but it remained on her eyes and could attack her eyes; maybe when she is talking and she keeps quiet*."

We come to learn that Esther was first "attacked" when she was 1 year old: "*It could only attack half of her body, let us say maybe one leg, so when they brought medicine and tied on that leg, it would attack the other.*" She was taken to a health facility and treated for malaria with quinine; the mother now believes that it was the quinine that made her this way, because since then she can't speak properly. For Mariam, the mother believes it is linked to bewitchment, because she heard "*that there is someone in their clan who was of that kind..* I: With epilepsy? *Yes..*" Mariam does not attend the MHC.

Vignette 3: Quality of Care and Comfort

Noori, the caregiver in this household, is the mother to Ali (M, 16), and the grandmother to Jamila (F, age unknown). Ali's illness began when he was around 3 years of age, in which "*all of a sudden, he started shaking and he fell down.., and whenever he fell down, he would defecate and urinate himself.*" They initially went to the multiple traditional healers for 7 years until he was about 10 years old, at which point they stopped because "*they took my goats but he didn't heal.. People told me that leave traditional medicine and go to the health facility.*" For several years thereafter, they received tablets from several nearby health facilities scattered in neighboring villages, but the travel and medication costs were all out-of-pocket.

A few years ago, they came across a traveling doctor who would visit their home and provide medication there, but "*after some time, that doctor stopped coming and we no longer saw him, so someone told us that there are free tablets at [the MHC].*" Personally, she doesn't know what has caused Ali's illness, but that other people say "*that he has cerebral malaria and traditional healers say that it is cultural and family issues.. Because two children can't fall ill from the same family*."

Jamila is the Noori's granddaughter, and according to the Noori, "*malaria attacked her, and she started convulsing*" when she was around one and a half years old. For five and half years, until she was seven years of age, they sought traditional help for Jamila's condition. However, the caregiver worries that Jamila is not recovering as well as Ali. Noori states, "*Jamila doesn't realize when it's going to attack her, you find her suddenly down.. [while] the change is there but very little because she convulses so much still.. when it attacks Ali, it doesn't repeat.*"

Noori's experience at the MHC has been very positive, she receives medication free of charge compared to the past, and she finds that one health worker there "*talks to me as if I am his mother.. He really shows concern and tells me to always pick the tablets and comforts me.*" She tries her level best to take care of the children, but wishes that the community wouldn't abuse the children—"*even these other children abuse the little ones, that look these ones have epilepsy, but I comfort them.. Ali even cries when narrating to you after being abused.*"

Noori also worries about out-of-pocket expenses for medication since at times all the required medication is not available at the MHC. There were a time when she had to stop giving the children medication because she couldn't afford it, but then the children "*were too badly off and people told me to leave the boy and treat the girl*"; eventually she managed to resume both their treatments and improved their health.

Factors Explaining Intra-household Variations in Pathways to Care

These four households are exemplary of the general themes found across all 27 interviews. Along with all other interviews, these four vignettes were retroductively analyzed, to thematically assess the most common factors that were likely to be decisive in choosing the appropriate pathway to care for each patient by their respective caregiver. While the PASS-model [Hausmann Muela et al. (31)] facilitated situating our findings, further analysis identified specific factors applicable particularly to this context and our findings. These identified factors were: (1). Contextual illness narratives ascribed for each patient; (2). Burden of caregiving and personal motivators to care; (3). Relevant social and cultural influences, including the therapy management group; (4). Socio-economic resources to provide continued care for that patient in the long term; and lastly, (5). Structural aspects of care—knowledge of available treatment options, access to, and quality of that care. In this section we discuss each of these identified factors and end this section with a reflection on epilepsy, as a socially and culturally stigmatized disorder in this context and how it shapes chosen pathways to care.

Contextual Illness Narratives

In general, the specific context—namely, the time and place—of symptom onset, as well as perceived symptom severity and importance, played a role in the perceived causal illness etiology in the mind of the caregiver. This perceived causation shapes the contextual illness narrative created for the patient. The main symptoms that caregivers generally picked up on included: convulsions, "eye rolling," being "lame" (often referring to physical disability in the legs and arms), speech impairment, and having inappropriate "abusive" behavior. Despite attending

Vignette 4: Religious Prompting

We begin our interview enquiring about both the children who visit the MHC, and whom got the mental disorder first. According to their mother Prosper, it was the elder child Paul (M, 20), and it began immediately after his birth. They treated the boy for an infectious disease with blisters, soon followed by malaria treatment, but "*he couldn't even spend a week, maybe simple malaria attacks him, then he convulses, maybe you are sleeping, then he convulses.*" When aged six, they found a traveling doctor "*who could treat every illness.. and gave some tablets like millet grains*" and the boy recovered slightly, being able to talk again and his lameness reduced for about 4 years. However, this doctor soon stopped visiting their home and Paul's treatment stopped. This was all before the birth of the second child, Charles (M, 10).

When Paul was 10, they heard on the radio about a mental health doctor in the neighboring district [at the regional hospital also having a mental health clinic], and after many efforts Prosper managed to find him who then gave some tablets for free. However, the neighboring district was too far and costly to travel to, and so Prosper looked in town for similar medication. She once even cheated an informal drug shop owner who "*didn't even know their price.. I am the one who gave the price.. and she accepted not knowing what loss she was making.. but I failed to go back because she discovered the price.*" For a while after Prosper bought the medication at a private clinic. Eventually through the radio, Prosper came to hear that the medication had found its way to this MHC. This was back in 2014, and she was very happy to receive medication at the MHC, especially since there was one nurse who was kind to her.

Her second son, Charles' problem started when he was about 8 years old—Prosper began to notice that he had a lame arm and would knock many things over accidentally. But the mother admits there was a lot of delay in seeking care for him. It was only when 1 day while picking up Paul's medication at the MHC, that she found a ward "*where a certain lady was walking in a staggering way, so I went and asked what that ward was about, and the doctors said it was for lame people, so I decided to take Charles there because his hand was lame.*" After some treatment for the lame arm, Charles at some point got malaria, which led to convulsions. Prosper was "*worried so much that Charles too has also started to convulse and even thought of leaving him...*" But she kept silent about it: "*It was my secret and I didn't want [the doctor] to even know about it. But after some time, I was fed up, so I decided to go with him to the MHC.*" From 2015 onwards she has been visiting the MHC for both children.

Wrapping up the interview, we probe one last time about traditional medicine, to which the mother says "*The truth is that I would have tried but my religion doesn't allow such, but when others are conversing I hear what they have sold, goats, etc., and I thank God that he saved me from that, that I only use tablets from the hospital*."

the MHC, the most common perceived etiologies for these symptoms were malaria (notably cerebral malaria); malaria treatment, particularly quinine; or epilepsy, which in this context is believed to be caused by bewitchment. Several caregivers also stated not to know causation. Others retained what the MHC health workers tell them and understand it as a brain disorder, linked to a lack of blood flow to the brain.

As was the case for Vignettes 1 and 2, even if caregivers had some awareness of a biomedical causation, knowledge of available MNS services, as well as accessing the MHC for one patient, they did not always immediately seek the same type of care for the second person within the household. This discrepancy in help-seeking and caregiver decision-making was linked to the differences in perceived causal links and timing of illness onset for each patient, limited/lack of knowledge on MNS disorders, as well as possible denial and rejection of a stigmatizing situation—namely, the fear of epilepsy.

Burden of Caregiving, and Personal Motivators to Care

The burden of care primarily fell on a female member of the family, usually the mother, but sometimes also the grandmother or elder sister. Fathers were frequently recalled as becoming easily fed up with the patients, who due to the chronic nature of their illness require significant time, attention, and financial resources spent on them. In Vignette 4, we see that the caregiver became so worried with the second child's illness onset, that she contemplated abandoning the child and even kept his symptoms a secret from the MHC health provider initially; it was only when she grew too exhausted from managing the situation that she finally also sought care for the second child at the MHC. Thus, the emotional capacity of caregivers was an important individual level factor affecting caregiver decision-making. Other personal motivators for the caregivers to continue taking care of their family members included the belief in God and fate; as well as the "goodness" of the patient/child and them deserving a better life.

Socio-Cultural Norms and the Therapy Management Group

Caregiver decision-making was influenced by socio-cultural notions related to the lay knowledge and meanings of illness symptoms. Caregivers were influenced by the perception of individuals around them, in particular the therapy management group—namely, those individuals close to the patient who partook in some manner of joint caregiving responsibilities. In some cases, the caregiver's contextual illness narratives were linked specifically to the patients' therapy management group members like the father or grandparents of the patient, while for other caregivers it was associated with the perceptions of surrounding community members, such as neighbors or friends.

These interactions with other members of society often shaped and reconsolidated the illness narrative in the mind of the caregiver. If the illness was highly stigmatized by the therapy management group and/or the larger community, such as was the case for epilepsy, this stigma would impact the caregivers chosen pathway to care for their patients. As such, the resultant contextual illness narratives were often a combination of the observed symptoms, their perceived etiologies, and socio-cultural norms and influence.

Socio-Economic Aspects of Care

The data also highlights how the cost of therapeutic care was a significant barrier to care being sought. Out-of-pocket expenditures for any form of treatment, whether it is traditional healing, neuropsychiatric medication, or even the travel costs associated with visits to a health facility, were important considerations in caregivers' foregoing one treatment option in favor of another lesser expensive option, or conversely returning to a previously forsaken option. The same choice—in how to *best* spend limited finances—extends to caregivers choosing *whom* to spend their money on treatment for when they have multiple persons to care for. In Vignette 1, the caregiver claims that the

second child does not receive biomedical care at the MHC, due to insufficient funds to treat two patients simultaneously.

Structural Aspects of Care

Many of the caregivers in this study came to know of the MHCs existence through long-winded means—thus, knowledge of the MHC's existence and it being an option for treatment was a deciding factor in caregivers' decision-making. When caregivers were aware of the MHC and its available care provisions, it was of interest to note the importance of receiving *good* quality of care from the MHC—this was especially notable in Vignette 3. Having positive interpersonal relationships with health workers at the MHC was pertinent for caregivers. Perceived good quality care provision played a role in ensuring caregiver satisfaction and consistent use of the chosen therapeutic option. This was especially relevant in decision-making processes for illnesses that are otherwise stigmatized by the rest of society—it is already hard enough to take care of a patient with an MNS disorder, without having the additional burden of encountering rude or abusive care providers.

Epilepsy: A Socially and Culturally Stigmatized Disorder

Within this context epilepsy (like severe mental disorders) is believed to be a *clan illness*, and is highly stigmatized since it is socio-culturally linked to bewitchment, spirit possession, and familial curses. This stigma is especially notable in cases where the patients are discriminated against and bullied by community members for having epilepsy like in Vignette 3, or when traditional healers claim the hereditary link can only be due to bewitchment like in Vignette 2. For contextual illness narratives that are linked to epilepsy, caregivers almost always resort in traditional help at some point in the overall help-seeking trajectory.

This stigma can also extend to the biomedical treatment available for epilepsy at public health facilities, including the MHC. For instance, in the case of Vignette 3, it was the fear of convulsions turning into the socio-culturally stigmatized epilepsy, which forced the caregiver to seeking biomedical care in the case of the second child. This implies that convulsions (which may be a familiar event for children under five and linked to fever, malaria or meningitis) by themselves are not necessarily perceived as being equivalent to the cultural form of epilepsy. By this logic, it is possible that in the mind of the caregiver, convulsions can be treated biomedically, while epilepsy cannot.

Knowing these contextual understandings, the health workers at the MHC have come up with an ingenious grounded solution to combat any associated stigma with epilepsy—they simply do not use the word "epilepsy," neither verbally nor written in their diagnoses of patients. Rather they refer to the specific type of seizure by its medical name such as "grand mal seizures" or "temporal lobe seizures." The caregivers, who are lay members of society with limited medical knowledge, are generally content to have this medical terminology—which they do not know the meaning of—written in the patient medical booklets. They continue to seek the appropriate biomedical care for it at the MHC, without ever linking it to the socio-culturally stigmatized illness of epilepsy.

DISCUSSION

Our data showcase that across all interviews caregivers' initial chosen pathways to care for individual patients were based on a multiplicity of factors that converge to influence their differential decision-making processes. The interplay of these factors in caregiver decision-making processes were different from one patient to another. The resultant selected pathways to care were flexible, variable and uncertain; in some cases, even amongst patients within the same household by the same caregiver. **Figure 1** is an illustration of various decision-making approaches that may occur for different patients by the one same caregiver in cases of intra-household variation. The figure can be viewed as a theoretical construction of how the complexity of intra-household variation in chosen pathways to care, by caregivers of persons with MNS disorders, may play out within this context.

Differences in care seeking pathways depend on the caregiver's perceived explanatory contextual illness narratives around the specific disorder for each patient. This is similar to other documented instances for MNS disorders across Uganda (13, 30, 40, 41). However, in this study of particular interest was how caregivers attribute a given contextual illness narrative to one patient over another, in some cases even within the same household. We hypothesize that if the caregiver ascribes a different contextual illness narrative to the second person within the household, it could naturally then lead to a different chosen pathway to care than the first patient.

Patient preferences and autonomous decision-making for their own health should also be taken into account and advocated for respectively, especially in this context (42). However, considering the burden of MNS disorders and depending on the ascribed contextual illness narrative for each patient, caregiver seek out appropriate care pathways for that patient. As shown in previous studies on mental disorders in this context, traditional medicine and religious care can often be either a first recourse to help or a secondary option after biomedical care fails (13, 16, 21, 40). These help-seeking itineraries are often multi-sectoral and can be both simultaneous or sequential in nature (30).

The consequence of intra-household variations is that one patient may receive prioritization over the other, in terms of who has the available resources spent on them, and who receives what type of care, especially in resource-constrained settings such as these. It is important to recognize that personal motivators can, both unintentionally or intentionally, influence a caregiver in favoring the recovery of one child over another. This intra-household prioritization of access to preventive care or treatment is reported to be a neglected area of enquiry within health-seeking behavioral studies (33).

This leads us to the notion of social vulnerability (43) and more specifically patient vulnerability. Patient vulnerability in being prioritized or not when receiving care may be influenced by factors such as higher parity of the mother (in case she is the main caregiver), or the child's birth order or gender. There is a dearth of

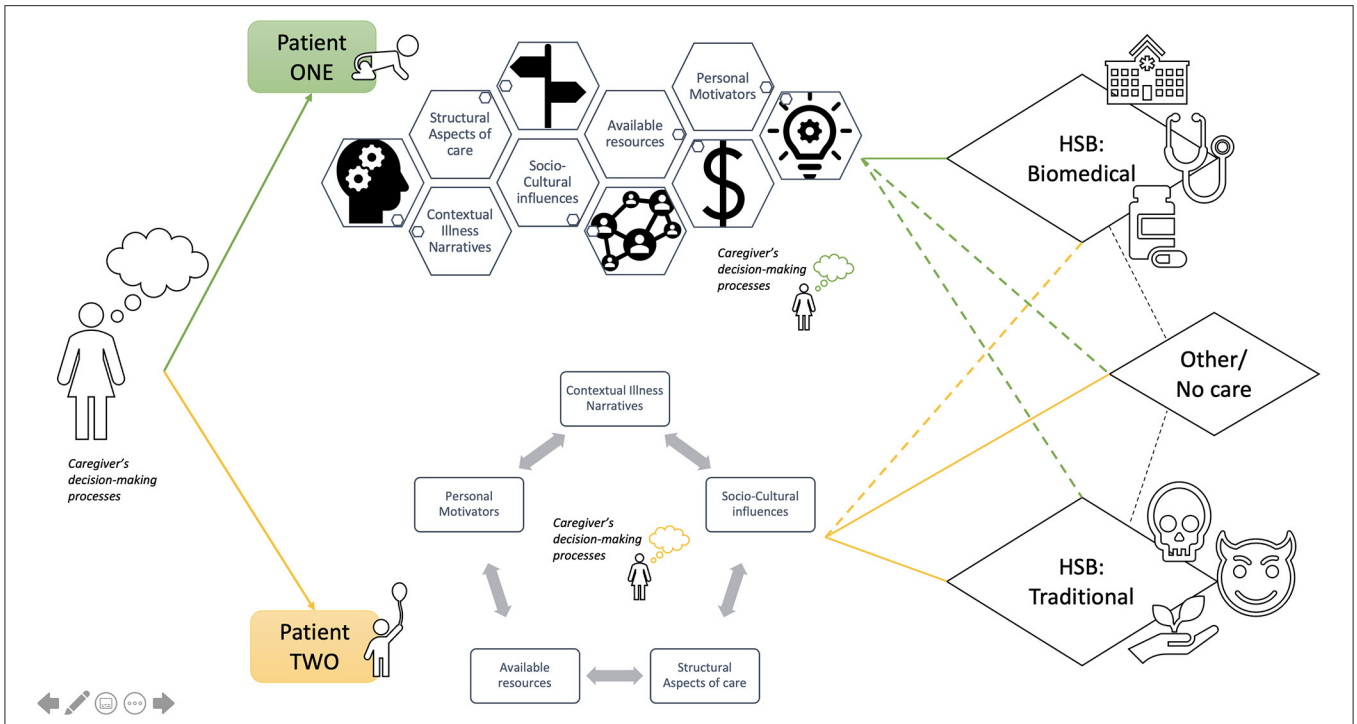


FIGURE 1 | Illustration of possible intra-household variations in chosen pathways to care by a caregiver of two persons with epilepsy and mental disorders living within the same household.

research in this particular line of enquiry; however, one study in a high-income country indicates that girls are much less likely to obtain needed treatment for particular mental disorders than are boys, while middle birth order children are less likely to receive mental health care and treatment than are oldest, youngest or only children (44).

Nonetheless, it is also important to emphasize that these processes of prioritization are (intrinsically) dynamic in time and space; they have their own rationality and they are not necessarily problematic. They can also be viewed "positively," as an indication of flexibility and adaptability of the caregivers, considering the unique character of every patient and the variability in resources available. Further research is required on these social factors, the prioritization and selection of care, and their impact on patient vulnerability by caregivers of persons living with MNS disorders in this and other low-resource settings.

In a few cases, the caregiver whom we met at the MHC was the father of the patient. The father's role was primarily to provide financial support toward chosen treatments, which is similar to findings from another recent Ugandan study on epilepsy (14). One study in the USA reports that having larger numbers of adults within a household helps in children receiving treatment, by possibly reducing the burden of care and impact of resource-constraints; while the presence of a father inhibits the likelihood of a child receiving care (44). However, it remains to be seen to what extent this would be valid in sub-Saharan African contexts, where the father is often the economic provider for a family.

Our study also highlighted a pronounced caregiver fatigue in relation to their duties for patients with chronic MNS disorders, like that of epilepsy. This fatigue in providing care can be especially observed among primary caregivers, who face the largest burden of care, and is even more likely when a second child also falls chronically ill in the same manner (14). The data indicates there was a withholding of information and delay in seeking help in some instances. This can also be viewed as some form of control and/or a coping mechanism in an otherwise chaotic and exhaustion-inducing scenario. It also highlights that there still exists an unmet need for the recognition of relatives and families as "caregiving experts," and as genuine partners in patients' pathways to care and health trajectories, as well as in biomedical and psychiatric practice and research (45).

In a system where the caregivers of people with MNS disorders remain undervalued and their contributions to the formal and informal health system outweigh the recognition they actually receive (46), these findings highlight the importance of acknowledging the role that intrinsic and extrinsic motivators play in how, why and to whom caregivers ensure and provide MNS care for, especially in low-resource circumstances. Strategies focusing on caregiver attitudes and information sharing have been found to translate into more positive outcomes, while encounters with health professionals can be perceived as frustrating to caregivers (47). Increased perceived autonomy supportiveness of caregivers, alongside that of the patients, may motivationally impact caregivers in their consequent care-giving behaviors through adjustments in their

emotional and cognitive capacities (47). It has also been found that changes in the process and content of family psycho-education—reflecting the specific social, cultural and gendered realities—worked best for postpartum psychosis in central Uganda (28). These strategies may be of relevance for this specific context, where the improved emotional and social support of caregivers, as well as the inclusion of the therapy management group and group care may yield to better patient outcomes through joint decision-making processes.

In the creation of a contextual illness narrative (which can be thought of as an automatic perceptual and cognitive reaction to understanding a given health situation), the caregiver is also placing a label or "tag" in defining the problem. In labeling theory, these attitudes and actions toward stereotyping are linked to stigmatizing outcomes (48). Thus, the label of "being bewitched," being "mentally ill," or having "epilepsy" are additional factors that may influence any actions taken toward help-seeking. In this specific context these labels do not simply affect the patient, but by association can also touch upon the larger family and extended relatives' group. Referred to as courtesy stigma or social stigma, this process of stigmatizing a phenomenon through its labels has been previously reported cross-culturally, as well within the Ugandan context, especially as linked to MNS disorders and, in particular, to epilepsy (49–51).

The reflections on epilepsy as a socially and culturally stigmatized disorder highlight how this stigma was locally managed by MHC staff in efforts to provide continued biomedical care. While, the existence of this stigma is largely supported by the literature (52, 53), these grass-roots tactics are important to note, as there is a substantial gap in knowledge, and interventional research to reduce MNS-related stigma and discrimination, especially in low-income settings (54). This is particularly relevant in Uganda, where estimated country-level prevalence of epilepsy has been reported to be as high as 10.3 per 1,000 people in eastern regions of the country (39).

While the ability to pay for health care is variable, financial facilitators or barriers are likely to remain influencing factors in caregiver decision-making processes especially in resource constrained settings. From a socio-economic perspective, out-of-pocket expenses are known to contribute directly to pluralistic therapeutic itineraries (15). The implications for the MHC are that access to free psychotropic medication for the patients acts as an effective motivator for the caregivers in accessing biomedical care for the patients. As such, the MHC can be a key therapeutic choice especially once caregivers see active and visible improvements in the patient's condition once stabilized on them through sustained pharmacological treatment. However, for patients who have only recently started pharmacological treatment and show little or no immediate recovery, the doubt about the benefits of biomedical care in combination with out-of-pocket payments, may likely revert caregivers toward other pathways of care or leave patients without care.

Thus, due to the chronic nature of epilepsy or other mental disorders that require long term pharmacological treatment to prevent relapse, unavailability of psychotropic medication at the MHC, drug-stockouts, and the resultant out-of-pocket medication purchases remain significant barriers to ensure sustained biomedical care (13, 14). There is likely a constant cost-benefit analysis that caregivers are performing in their decision-making processes, sometimes even at the expense of both patients' health. Poverty and associated vulnerabilities indeed shape patient health outcomes, via the pathways to care, or lack of, that are ultimately chosen by the caregivers.

This link between poverty and mental health outcomes is well documented (49, 55). In this study, with financial barriers and out-of-pocket expenses being a significant barrier to biomedical care—barriers that further encourage pluralistic health seeking behaviors—it is important to recognize the need for ensuring universal health care for MNS disorders (56). Bringing MNS concerns to the forefront for reflection and prioritization in the Ugandan public health system would encourage the country toward the creation of a holistic, high-quality, patient-centered health system as advocated for by the global health community (57, 58).

Finally, it is crucial for MNS patients and their caregivers to have knowledge and awareness of what MNS services and provisions exist in reality and what is accessible to them, especially for stigmatized conditions like epilepsy (59). Aside from the social and economic vulnerabilities of MNS disorders, the widespread stigma—attached to MNS patients, their caregivers and mental health specialists alike—acts as deeply ingrained social, structural, and even institutional barriers toward ensuring equitable MNS care (45, 52, 53, 60, 61). The equitable coverage of quality MNS care is essential if we are to ensure that patients and their caregivers have access to safe, effective, timely, efficient, equitable, and patient-centered care (56). The right to health, and especially that of humane care, should be a basic underpinning in providing treatment for MNS disorders, regardless of context, and resource constraints (7).

CONCLUSION

This study showcases the variety of ways in which mental, neurological and substance-use disorders, in particular that of epilepsy, are conceptualized by the caregivers of patients with MNS disorders in rural eastern Uganda. Results show that associated help-seeking itineraries for MNS disorders are largely pluralistic; oftentimes combining and alternating between various pathways to care. In unraveling *how* and *why* intra-household variations to pathways of care for MNS disorders occur, we highlight that these variations are likely a result of the complex interplay of individual, social, financial and structural factors, especially in resource-constrained settings. Finally, if the equitable coverage of quality MNS care and the presence of high quality mental health systems of care is to be achieved in the long run, then further research and prioritization of MNS health care in global health policy, and practice is of urgent essence.

LIMITATIONS

This study was a one-time qualitative exploration from the perspectives of the caregivers. There is no longitudinal data

on how stable caregiver contextual illness narratives are or how they influence one another over time. There is also the question of reliability of lay conceptualizations and diagnoses of MNS disorders in the context of Iganga. The crystallization and stability over time of these caregiver contextual illness narratives, their linked help-seeking trajectories for MNS patients, and the reliability of illness diagnosis would be of interest for further study. Additionally, future study on patient perspectives (for those having capacity), their preferences, and autonomous health-related decision-making would be also of interest to complement caregiver perspectives in a setting such as this.

DATA AVAILABILITY STATEMENT

The data supporting the findings of this study/publication are retained at the Institute of Tropical Medicine, Antwerp and are not openly accessible due to ethical and privacy concerns. Pseudonymised data sets can however be made available after approval of written requests to the Institute of Tropical Medicine at ITMresearchdataaccess@itg.be/.

ETHICS STATEMENT

The studies involving human participants were reviewed and approved by Institutional Review Boards of: Institute of Tropical Medicine in Antwerp, Belgium; Makerere University, School of Public Health in Kampala, Uganda; and Ugandan National Council for Science and Technology. All participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

NDPS and BC designed the study. NDPS collected and analyzed all data. JMR and KPG provided critical analyses of results. NDPS drafted the manuscript. All authors critically reviewed manuscript drafts and have consented to this manuscript.

FUNDING

This work was supported by funding from the European Commission, through the Erasmus Mundus Joint Doctorate Fellowship: Specific Grant Agreement 2014-0681, awarded to NDPS. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

ACKNOWLEDGMENTS

We would like to acknowledge Iganga district hospital and its mental health clinic, all the hospital staff and managers who supported this research, Jeroen De Man for study conduction support, and Betty Kyobe as our qualitative interviewer. We would also like to thank Claudia Sanchez Nieto and Fatou Jaiteh for their constructive inputs in early editions of this manuscript. Finally, this would not have been possible without the all the caregivers, women and men, who participated in this study, and trusted us with their lived experiences.

REFERENCES

1. Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, et al. Global burden of disease attributable to mental and substance use disorders: findings from the global burden of disease study 2010. *Lancet.* (2013) 382:1575–86. doi: 10.1016/S0140-6736(13)61611-6
2. Vigo D, Thornicroft G, Atun R. Estimating the true global burden of mental illness. *Lancet Psychiatry.* (2016) 3:171–8. doi: 10.1016/S2215-0366(15)00505-2
3. Steel Z, Marnane C, Iranpour C, Chey T, Jackson JW, Patel V, et al. The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013. *Int J Epidemiol.* (2014) 43:476–93. doi: 10.1093/ije/dyu038
4. Walker ER, McGee RE, Druss BG. Mortality in mental disorders and global disease burden implications: a systematic review and meta-analysis mental disorder mortalitymental disorder mortality. *JAMA Psychiatry.* (2015) 72:334–41. doi: 10.1001/jamapsychiatry.2014.2502
5. Beghi E, Giussani G, Nichols E, Abd-Allah F, Abdela J, Abdelalim A, et al. Global, regional, and national burden of epilepsy, 1990–2016: a systematic analysis for the global burden of disease study 2016. *Lancet Neurol.* (2019) 18:357–75. doi: 10.1016/S1474-4422(18)30454-X
6. Ba-Diop A, Marin B, Druet-Cabanac M, Ngoungou EB, Newton CR, Preux P-M. Epidemiology, causes, and treatment of epilepsy in sub-Saharan Africa. *Lancet Neurol.* (2014) 13:1029–44. doi: 10.1016/S1474-4422(14)70114-0
7. Saraceno B, van Ommeren M, Batniji R, Cohen A, Gureje O, Mahoney J, et al. Barriers to improvement of mental health services in low-income and middle-income countries. *Lancet.* (2007) 370:1164–74. doi: 10.1016/S0140-6736(07)61263-X
8. Kigozi FN, Ssebunnya J. Integration of mental health into primary health care in Uganda: opportunities and challenges. *Ment Health Fam Med.* (2009) 6:37–42.
9. Kigozi F, Ssebunnya J, Kizza D, Cooper S, Ndyanabangi S, Mental H, et al. An overview of Uganda's mental health care system: results from an assessment using the world health organization's assessment instrument for mental health systems (WHO-AIMS). *Int J Ment Health Syst.* (2010) 4:1. doi: 10.1186/1752-4458-4-1
10. Ssebunnya J, Kigozi F, Ndyanabangi S. Developing a national mental health policy: a case study from Uganda. *PLoS Med.* (2012) 9:e1001319. doi: 10.1371/journal.pmed.1001319
11. Mugisha J, Abdulmalik J, Hanlon C, Petersen I, Lund C, Upadhaya N, et al. Health systems context(s) for integrating mental health into primary health care in six Emerald countries: a situation analysis. *Int J Ment Health Syst.* (2017) 11:7. doi: 10.1186/s13033-016-0114-2
12. Mugisha J, Ssebunnya J, Kigozi FN. Towards understanding governance issues in integration of mental health into primary health care in Uganda. *Int J Ment Health Syst.* (2016) 10:25. doi: 10.1186/s13033-016-0057-7
13. Kisa R, Baingana F, Kajungu R, Mangen PO, Angdembe M, Gwaikolo W, et al. Pathways and access to mental health care services by persons living with severe mental disorders and epilepsy in Uganda, Liberia and Nepal: a qualitative study. *BMC Psychiatry.* (2016) 16:305. doi: 10.1186/s12888-016-1008-1
14. Abbo C, Mwaka AD, Opar BT, Idro R. Qualitative evaluation of the outcomes of care and treatment for children and adolescents with nodding syndrome and other epilepsies in Uganda. *Infect Dis Poverty.* (2019) 8:30. doi: 10.1186/s40249-019-0540-x
15. Abbo C, Odokonyero R, Ovuga E, A. narrative analysis of the link between modern medicine and traditional medicine in Africa: a

case of mental health in Uganda. *Brain Res Bull.* (2019) 145:109–16. doi: 10.1016/j.brainresbull.2018.07.018
16. Sarkar N, Bardaji A, Peeters Grietens K, Bunders-Aelen J, Baingana F, Criel B. The social nature of perceived illness representations of perinatal depression in rural Uganda. *Int J Environ Res Public Health.* (2018) 15:1197. doi: 10.3390/ijerph15061197
17. Wanyama JN, Tsui S, Kwok C, Wanyenze RK, Denison JA, Koole O, et al. Persons living with HIV infection on antiretroviral therapy also consulting traditional healers: a study in three African countries. *Int J STD AIDS.* (2017) 28:1018–27. doi: 10.1177/0956462416685890
18. Moshabela M, Bukenya D, Darong G, Wamoyi J, McLean E, Skovdal M, et al. Traditional healers, faith healers and medical practitioners: the contribution of medical pluralism to bottlenecks along the cascade of care for HIV/AIDS in Eastern and Southern Africa. *Sex Transm Infect.* (2017) 93:e052974. doi: 10.1136/sextrans-2016-052974
19. Anywar G, van't Klooster CIEA, Byamukama R, Wilcox M, Nalumansi PA, de Jong J, et al. Medicinal plants used in the treatment and prevention of malaria in Cegere sub-county, Northern Uganda. (2016) 14:12. doi: 10.17348/era.14.0.505-516
20. Rutebemberwa E, Bagonza J, Tweheyo R. Pathways to diabetic care at hospitals in rural Eastern Uganda: a cross sectional study. *BMC Health Serv Res.* (2019) 19:33. doi: 10.1186/s12913-019-3873-z
21. van Duijl M, Kleijn W, de Jong J. Unravelling the spirits' message: a study of help-seeking steps and explanatory models among patients suffering from spirit possession in Uganda. *Int J Ment Health Syst.* (2014) 8:24. doi: 10.1186/1752-4458-8-24
22. Abbo C, Ekblad S, Waako P, Okello E, Musisi S. The prevalence and severity of mental illnesses handled by traditional healers in two districts in Uganda. *Afr Health Sci.* (2009) 9.
23. Saunders JC. Families living with severe mental illness: a literature review. *Issues Ment Health Nurs.* (2003) 24:175–98. doi: 10.1080/01612840305301
24. Awad AG, Voruganti LNP. The Burden of schizophrenia on caregivers. *Pharmacoeconomics.* (2008) 26:149–62. doi: 10.2165/00019053-200826020-00005
25. Wang JS-H, Ssewamala FM, Han C-K. Family economic strengthening and mental health functioning of caregivers for AIDS-affected children in rural Uganda. *Vulnerable Child Youth Stud.* (2014) 9:258–69. doi: 10.1080/17450128.2014.920119
26. Muliira RS, Muliira JK. Health-promoting practices and the factors associated with self-reported poor health in caregivers of children orphaned by AIDS in southwest Uganda. *Afr J AIDS Res.* (2011) 10:479–86. doi: 10.2989/16085906.2011.646663
27. Kagotho N, Ssewamala FM. Correlates of depression among caregivers of children affected by HIV/AIDS in Uganda: findings from the Suubi-Maka family study. *AIDS Care.* (2012) 24:1226–32. doi: 10.1080/09540121.2012.658754
28. Nakigudde J, Ehnvall A, Mirembe F, Musisi S, Airaksinen E. An exploratory study on the feasibility and appropriateness of family psychoeducation for postpartum women with psychosis in Uganda. *BMC Psychiatry.* (2013) 13:1–12. doi: 10.1186/1471-244X-13-131
29. Olwit C, Musisi S, Leshabari S, Sanyu I. Chronic sorrow: lived experiences of caregivers of patients diagnosed with schizophrenia in Butabika Mental Hospital, Kampala, Uganda. *Arch Psychiatr Nurs.* (2015) 29:43–8. doi: 10.1016/j.apnu.2014.09.007
30. Skylstad V, Akol A, Ndeezi G, Nalugya J, Moland KM, Tumwine JK, et al. Child mental illness and the help-seeking process: a qualitative study among parents in a Ugandan community. *Child Adolesc Psychiatry Ment Health.* (2019) 13:3. doi: 10.1186/s13034-019-0262-7
31. Rosenstock IM, Strecher VJ, Becker MH. Social learning theory and the health belief model. *Health Educ Q.* (1988) 15:175–83. doi: 10.1177/109019818801500203
32. Champion VL, Skinner CS. The health belief model. In: Glanz K, Rimer BK, Viswanath K, editors. *Health Behavior and Health Education: Theory, Research, and Practice*. Jossey-Bass (2008). p. 45–65.
33. Hausmann Muela S, Muela Ribera J, Toomer E, Peeters Grietens K. The PASS-model: a model for guiding health-seeking behavior and access to care research. *Malaria Rep.* (2012) 2:e3. doi: 10.4081/malaria.2012.e3
34. Henshaw EJ, Freedman-Doan CR. Conceptualizing mental health care utilization using the health belief model. *Clinical Psychol Sci Pr.* (2009) 16:420–39. doi: 10.1111/j.1468-2850.2009.01181.x
35. Janzen JM. Therapy management: concept, reality, process. *Med Anthropol Q.* (1987) 1:68–84. doi: 10.1525/maq.1987.1.1.02a00040
36. UBOS. *National Population and Housing Census 2014 Area Specific Profiles - Iganga District: Uganda Bureau of Statistics (2017).* Available online at: http://www.ubos.org/onlinefiles/uploads/ubos/2014CensusProfiles/IGANGA.pdf (accessed March 19, 2020).
37. Government of Uganda. *Iganga District Local Goverment.* (2020). Available online at: https://iganga.go.ug/lg/overview (accessed March 19, 2020).
38. NHS England. *Who is Considered a Carer?* (2020). Available online at: https://www.england.nhs.uk/commissioning/comm-carers/carers/ (accessed April 4, 2020).
39. Ngugi AK, Bottomley C, Kleinschmidt I, Wagner RG, Kakooza-Mwesige A, Ae-Ngibise K, et al. Prevalence of active convulsive epilepsy in sub-Saharan Africa and associated risk factors: cross-sectional and case-control studies. *Lancet Neurol.* (2013) 12:253–63. doi: 10.1016/S1474-4422(13)70003-6
40. Nsereko JR, Kizza D, Kigozi F, Ssebunnya J, Ndyanabangi S, Flisher AJ, et al. Stakeholder's perceptions of help-seeking behaviour among people with mental health problems in Uganda. *Int J Ment Health Syst.* (2011) 5:5. doi: 10.1186/1752-4458-5-5
41. Abbo C. Profiles and outcome of traditional healing practices for severe mental illnesses in two districts of Eastern Uganda. *Glob Health Action.* (2011) 4:7117. doi: 10.3402/gha.v4i0.7117
42. Waweru E, Sarkar NDP, Ssengooba F, Gruénais M-E, Broerse J, Criel B. Stakeholder perceptions on patient-centered care at primary health care level in rural eastern Uganda: a qualitative inquiry. *PLoS ONE.* (2019) 14:e0221649. doi: 10.1371/journal.pone.0221649
43. Ribera JM, Hausmann-Muela S. The straw that breaks the camel's back redirecting health-seeking behavior studies on malaria and vulnerability. *Med Anthropol Q.* (2011) 25:103–21. doi: 10.1111/j.1548-1387.2010.01139.x
44. Zimmerman FJ. Social and economic determinants of disparities in professional help-seeking for child mental health problems: evidence from a national sample. *Health Serv Res.* (2005) 40:1514–33. doi: 10.1111/j.1475-6773.2005.00411.x
45. Schulze B, Rössler W. Caregiver burden in mental illness: review of measurement, findings and interventions in 2004–2005. *Curr Opin Psychiatry.* (2005) 18:684–91. doi: 10.1097/01.yco.0000179504.87613.00
46. The Lancet. The high cost of unpaid mental health care. *Lancet.* (2017) 389:1274. doi: 10.1016/S0140-6736(17)30871-1
47. Ohaeri JU. The burden of caregiving in families with a mental illness: a review of 2002. *Curr Opin Psychiatry.* (2003) 16:457–65. doi: 10.1097/01.yco.0000079212.36371.c0
48. Link BG, Phelan JC. Stigma and its public health implications. *Lancet.* (2006) 367:528–9. doi: 10.1016/S0140-6736(06)68184-1
49. Ssebunnya J, Kigozi F, Lund C, Kizza D, Okello E. Stakeholder perceptions of mental health stigma and poverty in Uganda. *BMC Int Health Hum Rights.* (2009) 9:5. doi: 10.1186/1472-698X-9-5
50. Quinn N, Knifton L. Beliefs, stigma and discrimination associated with mental health problems in Uganda: implications for theory and practice. *Inter J Soc Psychiatry.* (2014) 60:554–61. doi: 10.1177/0020764013504559
51. Koschorke M, Padmavati R, Kumar S, Cohen A, Weiss HA, Chatterjee S, et al. Experiences of stigma and discrimination faced by family caregivers of people with schizophrenia in India. *Soc Sci Med.* (2017) 178:66–77. doi: 10.1016/j.socscimed.2017.01.061
52. Kirabira J, Nakawuki M, Fallen R, Zari Rukundo G. Perceived stigma and associated factors among children and adolescents with epilepsy in south western Uganda: a cross sectional study. *Seizure.* (2018) 57:50–5. doi: 10.1016/j.seizure.2018.03.008
53. Kaddumukasa M, Kaddumukasa MN, Buwembo W, Munabi IG, Blixen C, Lhatoo S, et al. Epilepsy misconceptions and stigma reduction interventions in sub-Saharan Africa, a systematic review. *Epilepsy Behav.* (2018) 85:21–7. doi: 10.1016/j.yebeh.2018.04.014

54. Thornicroft G, Mehta N, Clement S, Evans-Lacko S, Doherty M, Rose D, et al. Evidence for effective interventions to reduce mental-health-related stigma and discrimination. *Lancet.* (2016) 387:1123–32. doi: 10.1016/S0140-6736(15)00298-6
55. Lund C, De Silva M, Plagerson S, Cooper S, Chisholm D, Das J, et al. Poverty and mental disorders: breaking the cycle in low-income and middle-income countries. *Lancet.* (2011) 378:1502–14. doi: 10.1016/S0140-6736(11)60754-X
56. World Health Organization. *The WHO Special Initiative for Mental Health (2019–2023): Universal Health Coverage for Mental Health*. World Health Organization (2019). Available online at: https://apps.who.int/iris/handle/10665/310981
57. Kruk ME, Gage AD, Arsenault C, Jordan K, Leslie HH, Roder-DeWan S, et al. High-quality health systems in the Sustainable Development Goals era: time for a revolution. *Lancet Global Health.* (2018). doi: 10.1016/S2214-109X(18)30386-3
58. World Health Organisation. *Declaration of Astana*. (2018). Available online at: https://www.who.int/publications/i/item/WHO-HIS-SDS-2018.61 (accessed May 12, 2020).
59. Kaddumukasa M, Kakooza A, Kayima J, Kaddumukasa MN, Ddumba E, Mugenyi L, et al. Community knowledge of and attitudes toward epilepsy in rural and urban Mukono district, Uganda: a cross-sectional study. *Epilepsy Behav.* (2016) 54:7–11. doi: 10.1016/j.yebeh.2015.10.023
60. Corrigan PW, Miller FE. Shame, blame, and contamination: a review of the impact of mental illness stigma on family members. *J Ment Health.* (2004) 13:537–48. doi: 10.1080/09638230400017004
61. Becker AE, Kleinman A. Mental health and the global agenda. *N Eng J Med.* (2013) 369:66–73. doi: 10.1056/NEJMra1110827

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Advantages of publishing in Frontiers

OPEN ACCESS
Articles are free to read for greatest visibility and readership

FAST PUBLICATION
Around 90 days from submission to decision

HIGH QUALITY PEER-REVIEW
Rigorous, collaborative, and constructive peer-review

TRANSPARENT PEER-REVIEW
Editors and reviewers acknowledged by name on published articles

Frontiers
Avenue du Tribunal-Fédéral 34
1005 Lausanne | Switzerland

Visit us: www.frontiersin.org
Contact us: frontiersin.org/about/contact

REPRODUCIBILITY OF RESEARCH
Support open data and methods to enhance research reproducibility

DIGITAL PUBLISHING
Articles designed for optimal readership across devices

FOLLOW US
@frontiersin

IMPACT METRICS
Advanced article metrics track visibility across digital media

EXTENSIVE PROMOTION
Marketing and promotion of impactful research

LOOP RESEARCH NETWORK
Our network increases your article's readership