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Closing the Mental Health Treatment Gap through the Collaboration of Traditional and Western Medicine in Liberia

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Abstract

Liberians have experienced significant psychological trauma following fourteen years of violent civil war and the 2014–2015 Ebola epidemic, but there are only two psychiatrists for the entire population. However, many traditional healers commonly treat mental health-related illnesses throughout the country. This paper examines the potential for collaboration between traditional and Western medicine to close the mental health treatment gap in Liberia. We conducted 35 semi-structured qualitative interviews with Liberian traditional healers and utilizers of traditional medicine asking questions about common health problems, treatments, beliefs, and personal preferences. Participants discussed cultural attitudes, beliefs, and structural factors that may influence collaboration between traditional and Western medicine. Healers expressed willingness

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to collaborate in order to strengthen their skills, though realized Western physicians were hesitant to collaborate. Additionally, Liberians believed in both medical traditions, though preferred Western medicine. Finally, structural factors such as geographic distance and financial barriers made traditional medicine more accessible than Western medicine. Traditional healers and utilizers support collaboration as evidenced by their perceptions of cultural attitudes, beliefs, and structural factors within the Liberian context. With Liberia's overwhelming mental illness burden, collaboration between traditional healers and Western medicine physicians offers a solution to the treatment gap in Liberian mental health care.

Keywords

traditional medicine; Liberia; mental health; collaboration; treatment gap

BACKGROUND

Mental Health in Liberia

From 1989 to 2003, Liberians endured two psychologically traumatic civil wars later followed by the 2014–2015 Ebola crisis (Ministry of Health and Social Welfare, 2009; Shultz, Baingana, and Neria, 2015). Today, 11% of Liberians experience substance use disorders, 40% clinical depression, and 45% post-traumatic stress disorder (Kisa, et al., 2016). The Liberian mental health care system is inadequate to meet the needs of its population and mental health professionals are scarce with only two psychiatrists for the entire population of an estimated 4.3 million (Liebling-Kalifani, et al., 2011; Central Intelligence Agency, n.d.). As a result, there is a notable gap in formal mental health care for Liberians seeking treatment for mental illness and emotional trauma.

Many Liberians thus turn to traditional healers to address this gap in lieu of formalized Western mental health services (Kruk, et al., 2011; Ministry of Health and Social Welfare, 2009). Traditional medicine is defined by the World Health Organization as "the sum total of the knowledge, skills and practices based on theories, beliefs, and experiences indigenous to different cultures […] used in the maintenance of health, as well as in the prevention, diagnosis, improvement or treatment of physical and mental illnesses" (World Health Organization, 2000, p. 1). Often these include herbal, ritual, and supernatural remedies (Truter, 2007). While Western practitioners remain skeptical of traditional medicine, some interventions may relieve distress and improve mild symptoms of some conditions like depression and anxiety (Nortje, et al., 2016; Meissner, 2004). In fact, many people throughout Africa seek mental health care from traditional healers in the form of herbal remedies, counseling, and faith healing for conditions such as anxiety disorders, postpartum depression, and those of supernatural origin (Atindanbila and Thompson, 2011). Because traditional healers build strong relationships with their communities, share the same cultural lens, and are accessible, traditional healers can serve an important role in closing the mental health treatment gap (Patel, 2011).

National Mental Health Policy

In 2009, the first Liberian National Mental Health Policy was developed to "address the mental health needs of all Liberians through high quality, culturally appropriate, evidence-based, equitable and cost-effective care" (Ministry of Health and Social Welfare, 2009, p. 6). Many recommendations involve the formal health sector but also recognize that Liberians value and seek mental health care from traditional healers because of the inaccessibility of psychiatrists. The policy recommended collaboration between traditional medicine and primary health care through the establishment of the Liberian Center of Excellence for Community Mental Health. The Center would train clinicians, offer workshops for informal practitioners such as traditional healers, and encourage the sharing of knowledge and experiences. Such collaboration would improve access to culturally appropriate and affordable mental health care for Liberians (Ministry of Health and Social Welfare, 2009).

This paper presents data from a qualitative study identifying local Liberian mental health problems by traditional healers and assessing traditional healer's beliefs and treatment practices about mental health. The aim of this analysis is to understand the cultural attitudes, beliefs, and structural factors that may impact collaboration between traditional and Western medicine from the perspectives of traditional healers and utilizers.

METHODS

Study design and participants

This qualitative study identified Liberian traditional healers and service utilizers (N=35) from the greater Monrovia metropolitan area in Monsterrado County. The researchers worked with the head healer of an informal association, who made an announcement on the researcher's behalf to recruit for this study. They were able to recruit a homogeneous purposive sample of traditional healers from this informal association of practicing traditional healers. Because physical and mental ailments often go hand-in-hand, utilizers were recruited from healers' referrals as individuals who had previously sought either physical or mental health care services from traditional healers at any point. Participants were at least 18 years old, provided written or verbal informed consent, and were compensated with a $5 phone card or refreshments for their time. The study was approved by the institutional review boards of the University of Liberia and Partners Healthcare, the Partners Human Resource Committee.

Study procedures

Participant interviews were administered in private office or clinic spaces between March and April 2012. Participants could refuse or stop participation at any time. An American psychiatry resident facilitated thirty to sixty minute in-depth interviews in Standard English with the assistance of a Liberian medical student, who served as a Liberian English translator when necessary. The interview guide (Appendix 1) was developed from reviewed literature and consultation with a Liberian psychiatrist. The semi-structured guide consisted of open-ended questions on participant attitudes and beliefs on health problems and treatments and probes for detailed information. The study's focus on mental health was not explicitly stated to participants; rather, mental health issues emerged through conversation

on general health concerns and illnesses. Confidentiality was maintained using study IDs and a secure network with password protection.

Data analysis

Liberian members of the study team living in Massachusetts transcribed the interviews verbatim and included notes providing cultural context. Content analysis directed interpretation of the data through systematic coding and identification of themes and patterns by two members of the study team trained in qualitative methods (Hsiu-Fang and Shannon, 2005). NVivo software organized the data (QSR International, 2012). Six interview transcripts were used to develop a comprehensive codebook which was used for all interview transcripts. One of every five interviews was randomly selected for double coding to ensure inter-coder reliability and fidelity, resulting in a total of seven double-coded interviews. Differences were discussed until consensus was reached. After coding, themes were identified through careful examination and discussed among coders and the principal investigator. Analysis ceased when no new information was forthcoming.

RESULTS

Background characteristics of participants

Thirty-five interviews were conducted with 24 traditional healers and 11 utilizers (Table 1). Most (62.5%) healers were male and the average age of all healers was 52.3 years (SD=13.56). Healers varied in levels of education and years of practice, though all belonged to an informal organization for traditional healers or self-identified as traditional healers. After inquiry of general Liberian health problems and treatments, healers identified a range of mental and physical health conditions they treated. The most common were related to mental health and included open mole, epilepsy, depression or sadness, and general mental illness, as identified by study participants. Open mole is a type of anxiety that participants described as a soft spot on the top of the skull with varying symptoms such as headache, weakness, and “crazy”. Abramowitz (2010) defines open mole as an idiom of distress in Liberia, characterized by symptoms of pain, dizziness, headache, confusion, and social withdrawal, among others. Epilepsy, while not classified as a mental illness, was often described by participants as an illness with unnatural causes and traditional remedies, similar to other mental health issues described.

Most (54.5%) utilizers were male with a mean age of 24.5 years (SD=1.9), while the remaining 45.5% were female with a mean age of 40.0 years (SD=8.6). Utilizers had sought services from traditional healers for a variety of reasons, often initially for physical health care, but also for mental health care. Some initially sought services due to fractured wrist, typhoid, tooth aches, rashes, stomach ache, burns, wounds, and malaria. With further probing, many utilizers revealed they had also received care for open mole and sadness at other times.

Significant themes included cultural attitudes, beliefs, and structural factors influencing collaboration. Attitudes refer to the positions traditional healers and utilizers hold on specific topics while beliefs are defined as the acceptance of a concept as true. Both of these are

rooted in Liberian culture. Structural factors are those practices or societal elements that occur within this context. These themes emerged from conversation on health problems and treatments in Liberia, particularly mental health issues, traditional remedies, and experiences as or seeking services from traditional healers.

Cultural attitudes

Willingness of traditional healers to collaborate, expand skills, and improve knowledge—Several healers expressed a desire to improve their diagnoses and treatment skills to provide better care, including conducting lab work, diagnostic tests, and invasive procedures. They felt that collaboration with Western doctors would help accomplish these goals, as healers thought that doctors could teach them these skills and provide necessary support. One healer thought Western doctors could teach him the causes and preventive measures for certain illnesses, thus improving his knowledge and learning capacity. Improvement in skills and knowledge would enable healers to have more scientific proof to inform their treatment plans. One male healer explained:

> "I do not like to treat on assumption. I always want to get scientific proof because the thing herbalist cannot do is to take a particle from somebody a specimen and put it in the machine and tell exactly what happen. That's what Western drugs I mean Western tradition ah can do that. And ah they cannot open up to take something from inside and close. This two thing herbalists have not gotten to that."

Many healers expressed wanting to have these skills to improve patient care. Others agreed that collaboration would enable healers to better diagnose and treat their patients, receive Western medical help when needed, and improve health care in their communities. This 28 year-old male healer captured his desire to collaborate in the following example of treating a wound:

> "And then, when you want to maybe numb this place in some cases it critical, so we need some Western practitioner to and you know help you to numb so that you can do the traditional dressing and healing. It's most, it is mostly difficult because there is nobody that want to share with us."

Perceived unwillingness of Western physicians to collaborate—Most healers reported a lack of collaboration between the two practices. They felt that Western practitioners had no desire to cooperate, offer assistance, or share knowledge with them. Many healers expressed a desire to collaborate with physicians and were frustrated with the lack of reciprocation. This impacted how healers felt working within their communities; some healers felt unwelcome while others felt forced to work outside of the city because Western doctors in Monrovia did not want their practices affiliated with traditional healing. Comparing his experiences working in Liberia and Burkina Faso, one 64 year-old male healer said:

> "That's the thing that is lacking in Liberian society. […] We are not collaborating, traditional medicine is always looking at inferior, they say that we are inferior, they don't look it that that partner. So in other countries, we work together in the hospital and the patient freely select where to go. […] But it is not in Liberia."

This healer's experience revealed a more collaborative relationship between Western physicians and traditional healers in another Western African country compared to Liberia.

Preference for Western medicine—Both traditional healers and utilizers described a general preference for Western medicine. Of the sixteen traditional healers who were asked where they seek health care from for themselves, thirteen responded saying they would go to the hospital first. The others claimed to either treat themselves or seek care from another healer before going to the hospital. Healers rationalized their position, explaining that physicians conduct lab work, diagnostic tests, and other advanced procedures. Similarly, all but one utilizer preferred hospital care. A 28 year-old woman discussed her preference for Western medicine and its roots in education and methodology:

> "I prefer the doctor because he studied, he went into this field, he know exactly how to give you the treatment and when, so forth. Yes, he knows more about the treatment than even the country doctor [traditional healer]. The country doctor, some are just from speculation. Yes, they don't measure the, they don't know the dosage of the drugs that they are giving you or the herbs that they are giving you, but the doctor will know the dosage, they know how much to give you, when to give you it, and how to give you it."

Other utilizers described similar sentiments. Regardless of whether individuals practiced or utilized traditional medicine, the majority expressed preference for Western medicine.

Perceived dislike of traditional medicine within the community—A common point both traditional healers and utilizers made was that traditional medicine is regarded as inferior to Western medicine. Healers thought that both Western practitioners and citizens considered traditional medicine inferior or inadequate due to inaccuracies and inconsistencies of diagnoses and treatments. These perceptions consequently led to an unwillingness to collaborate by Western physicians and a preference for hospital care among utilizers. Utilizers further complained that traditional methods lacked precision and accuracy compared to Western techniques. One 43 year-old healer described tailoring his methods for treating open mole (anxiety) to address such criticism from his community:

> "So grade 1 I used teaspoon, grade 2 I used tablespoon, because most of this problem is that they are saying that traditional medical practitioner doesn't have a dosage. So I am more sensitive to this that when I begin when you begin to take the medicine then I will start measuring the pressure and the pressure will begin to drop bit by bit."

Utilizers commented on their discomfort with traditional healers' imprecise measures and questionable herbal treatments. Most reported seeking care from Western practitioners before traditional healers if available.

Cultural beliefs

Belief in both traditional and Western medicine—Despite negative feelings towards traditional medicine, a strong belief in both medical approaches was a prominent theme among all participants, but particularly among utilizers of traditional medicine. Utilizers

described believing in the power of Western drugs as well as traditional leaves, and even healers thought that certain drugs like sedatives and paracetamol could effectively treat patients. The illness dictates which healing method is pursued, though the other source is sought if the first choice proves ineffective. A 24 year-old male utilizer explained:

> "As for me, I believe in both ok, I believe in both because like I said from the beginning, most often it's like at times I have pain in my stomach and my grandmother provides let say root for me and definitely it stops the pain in my stomach so I believe in that. Likewise at time maybe if I have headache, I go to drug store or hospital and I'm given some drugs and it stop that pain, so I believe in both."

Belief illnesses respond best to specific approaches—Many healers and utilizers expressed an understanding that some diseases are better treated with Western medicine while others are better treated with traditional medicine. While healers described diabetes, hernia, and appendicitis as being better treated by Western doctors, they described open mole, depression, and other mental illnesses as their personal specialty. All utilizers, apart from two who did not know, believed that open mole was best treated by a traditional healer or by using herbal remedies such as leaves and pastes. Participants had differing opinions on which methods were best equipped to treat other mental health issues such as "insanity," epilepsy, and depression.

Utilizers also recognize that healers cannot treat some diseases. They reported choosing one practice depending on their conditions and symptoms, and then seeking care from the other only if their condition worsened or was not cured. This 24 year-old male utilizer described his perception of care-seeking decisions as follows:

> "Mostly because in the interior the people believe that when you get a sickness or when you are sick and you go to the hospital, the doctor will tell you they have check on you to find the kinds of sickness and if the doctor can't find any sickness, that means the people will believe that it is a country doctor problem may be African sign [curse] and you know they have to go country doctor to heal you that may get some one person poison you or they put something on the ground, you step on it so when the country doctor diagnose it they will not do any about it so they will have to carry you country doctor to cure you. Like some kinds of spirit follow you and you sick you will go to the hospital they will check on you and they will not find sickness so they have to carry you in the bush to the country doctor or the herbalist to treat you."

Similar descriptions of navigating between Western and traditional medicine were shared by other utilizers.

Structural Factors

Accessibility to Western medicine

Geographic proximity: Most participants complained that Western health care was difficult to access because there were no doctors or clinics near people's homes. Many stated that their only option was to seek mental and primary health care from traditional healers

because there were no nearby clinics. When asked why he seeks care from traditional healers, one utilizer responded:

> "It depends on the distance you are living because where we were you cannot find a doctor and you cannot find a clinic. And to even find drugs it's difficult so you just have to take in country herbs so for me I think those are some of the reasons."

Traditional healers echoed this lack of accessibility in terms of their own practices, claiming that if they needed assistance no doctors were available nearby. A 26 year-old male utilizer described his views on accessibility and why people seek care from traditional medicine:

> "Once the facility is there and people have the means to go, I don't think people will want to go to traditional doctors. […] for now if anything happens to me I will go to the doctor because at the time all those things happened to me it was lack of facilities and lack of access and ignorance so I went to traditional healer."

Financial barriers: Participants reported that Western medical care is also financially less accessible. Utilizers indicated that they often chose traditional medical care because it is less expensive. A 22 year-old male utilizer explained:

> "Some of the reason again is because some people cannot afford to go to the hospitals actually. And African medicines and herbalists are not really expensive."

A 27 year-old male utilizer also claimed that the main reason Liberians sought care from traditional healers was financial:

> "Because sometimes they don't really be expensive. […] Yes and sometimes according to the tradition, you will just carry few things. Sometimes you carry chicken or sometimes you just carry food stuff and the person really doesn't charge you more money as compare to the hospital."

Traditional healer's current practice of referral—Traditional healers refer sick utilizers to Western medical doctors either to undergo lab tests to better inform healers' diagnoses or when traditional treatments yield no results. Healers referred because they prioritized safety and wanted to cure patients. When diseases became too complicated, required surgery, or traditional treatment failed, healers would refer utilizers to the Western hospital. A 40 year-old female healer explained her perspective on referrals:

> "When I make the medicine I tell them that when you take the medicine and when the medicine not work, it is not able, you should go to the hospital. When they come and tell me that the medicine is not working, I tell them to go to the hospital, I can send them to the hospital and they go there. […] I can do country medicine but when I know that the country medicine not working, I can go to the hospital."

Healers often admitted to sending utilizers to the hospital and expressed a desire for Western doctors to reciprocate.

DISCUSSION

This study reveals the cultural attitudes, beliefs, and structural factors that impact future collaboration between traditional and Western medicine from the perspective of healers and utilizers that stemmed from discussion on mental health issues. Despite recognized cultural attitudes preferring Western medicine, traditional healers expressed that traditional medicine is widely accessible, corresponds with Liberian culture, and better addresses certain conditions. Liberian traditional healers expressed willingness to collaborate and work with Western physicians in order to improve their skills and knowledge, receive assistance when necessary, and better treat patients. However, they also realize that this desire to collaborate is not reciprocated by Western medicine practitioners, a sentiment consistent among traditional healers in other African nations: in a qualitative study of 24 South African traditional healers, 88% reported wanting to work with Western physicians but felt that Western physicians did not reciprocate the feelings because they viewed traditional healers as ineffective health professionals (Sorsdahl, Stein, and Flisher, 2010). Ugandan traditional healers similarly revealed willingness to work with the formal health care sector (Ovuga, Boardman, and Oluka, 1999). The results from this current study are supported by these observations from other qualitative research studies throughout Africa.

Qualitative studies of African clinicians support results on the perceived negative attitudes of physicians. A study of Ghanaian clinicians viewed traditional healers as delaying medical interventions, promoting non-adherence to prescription medications, and having inadequate scientific knowledge; for these reasons, the clinicians dissuaded patients from using healers (Kretchy, et al., 2016). Western practitioners in two separate South African qualitative studies echoed these concerns (Van Rooyen, et al., 2015; Nemutandani, Hendricks, and Mulaudz, 2016). African clinicians would consider collaborating with traditional healers if knowledge, training, and concerns for safety and efficacy were improved (Kretchy, et al., 2016). Training, professional skills development, research, and collaboration between professional councils may build a mutual understanding between the two practices (Van Rooyen, et al., 2015).

Many Liberians view traditional medicine as inferior and seek care from Western practitioners. However, Liberians simultaneously believe in traditional medicine and seek care for specific illnesses from traditional healers. Previous research supports this finding. South Africans consulted Western physicians more frequently than traditional healers for both mental health care needs and acute illness, but also looked towards traditional medicine if Western medicine failed (Sorsdahl, et al., 2009). Patients in Ghana criticized traditional medicine as being less sanitary and inaccurate, but also described its efficacy as “very good” (Gyasi, et al., 2011). Literature suggests some reasons for expressed ambiguity for traditional medicine (Abdullahi, 2011; Sorsdahl, et al., 2009; Kruk, et al., 2011). One reason dates back to the introduction of Western medicine into African societies, which caused a cultural-ideological clash, subsequently stigmatizing and undermining traditional medicine (Abdullahi, 2011). Another explanation could be the education of participants in these studies; individuals with little or no formal education are more likely to consult traditional healers than individuals who are more educated (Sorsdahl, et al., 2009). Despite these findings, a Liberian study found that individuals utilized the formal sector three times in the

year prior to the study compared to ten times from the informal sector during that same period for both mental and physical health conditions (Kruk, et al., 2011). Perceptions of traditional medicine compared to Western medicine indicate a preference for the latter, but this may not be exhibited in individual behavior.

Research has also found that traditional medicine corresponds with cultural beliefs in other African settings (Kisa, et al., 2016; Truter, 2007; Sorsdahl, Stein, and Flisher, 2010; Mbwayo, et al., 2013). Liberian culture appears to embrace medical pluralism, the simultaneous belief in two seemingly contradictory schools of thought, traditional and Western medicine. Liberians tend to utilize both formal and informal health care. For example, participants in a recent study claimed that their health care decisions depend on familial perceptions of cause; if witchcraft caused the mental illness, traditional healers were more often sought (Kisa, et al., 2016). Traditional healers have been found to be more adept at treating traditional ailments such as spirit possession, sorcery, and ancestral wrath (Truter, 2007). South African traditional healers also claimed that traditional methods better treated mental illness caused by bewitchment, rather than inborn or drug-induced mental illness (Sorsdahl, Stein, and Flisher, 2010). Similarly, in Kenya diagnosis and treatment of mental illness is culture-specific and depends on the beliefs of the community, meaning that the same condition may be diagnosed differently elsewhere (Mbwayo, et al., 2013).

Previous research on accessibility to Western medicine for mental health care supports our findings that Western medicine is geographically and financially inaccessible for many Liberians, driving choices to seek health care from traditional healers (Kruk, et al., 2011; Mbwayo, et al., 2013; Gyasi, et al., 2011; Kisa, et al., 2016). Other studies have also determined that human resource scarcity drives individuals to traditional healers (Patel, 2011). One study in Liberia's Nimba County found that it took an average of 2.3 hours to reach a formal health center, though 2–3 traditional healers lived in each village (Kruk, et al., 2011). This was a common finding in other studies. Regarding finances, another study of 305 Kenyan traditional medicine utilizers claimed that healers allowed them to pay for services at a later time or in installments (Mbwayo, et al., 2013). A mixed-methods study in Ghana reported that traditional medicine is often cheaper and more readily available to the impoverished compared to Western medicine (Gyasi, et al., 2011). This may not be the case regarding severe mental illness, however. In Liberia, a study of 22 Western practitioners shared that hospital care for severe mental illness costs less for patients than traditional healers. This study also interviewed practitioners from Nepal and Uganda, who alternatively claimed that traditional healers were less expensive for severe mental illness treatment (Kisa, et al., 2016). Not only does geography and finances impact accessibility to health care, but there are great shortages of skilled mental health care workers. Traditional healers can fill this gap and work alongside Western practitioners (Patel, 2011). In many countries, traditional medicine appears to be more accessible than Western medicine in terms of geography, finances, and workforce.

Across cultures, traditional healers refer utilizers to Western physicians. Several studies reported this in Liberia, Kenya, Uganda, and South Africa (Mbwayo, et al., 2013; Ovuga, Boardman, and Oluka, 1999; Van Rooyen, et al., 2015; Sorsdahl, Stein, and Flisher, 2010). In Kenya and South Africa, healers tended to refer when patient's condition failed to

improve (Mbwayo, et al., 2013; Sorsdahl, Stein, and Flisher, 2010) or because Western physicians have the skills, knowledge, technology, and equipment to better diagnose and manage illnesses (Van Rooyen, et al., 2015). Another South African study focusing on mental health care and referral suggests that healers refer their mentally ill patients when they are violent, aggressive, and destructive so that Western physicians can calm them with Western medicine (Sorsdahl, Stein, and Flisher, 2010). While traditional healers tend to practice referral, they acknowledged that Western physicians did not reciprocate, causing healers to feel unrecognized by Western physicians (Mbwayo, et al., 2013). These findings support the themes that emerged in the current study.

Limitations

Limitations due to the qualitative methods in this study must be considered. The participants were conveniently sampled and therefore may not be representative of traditional healers and utilizers in the Monrovia metropolitan area. The sample further consists of a small number of Liberian traditional healers and utilizers, indicating that the data may not reflect the opinions of other traditional healers or utilizers beyond the Monrovia metropolitan area. Additionally, selection bias may have occurred as participating healers and utilizers may share the desire to collaborate with Western physicians and expand knowledge on treating mental illness. Social desirability bias may have also occurred due to the presence of American researchers and Liberian medical students throughout the interviews. Though necessary, the researchers' presence may have encouraged participants to respond how they perceived the researchers wanted them to respond. This was accounted for by asking questions in several different ways, including questions about actions rather than opinions. Further, it is important to note that, while the study's focus was on mental health, healers and utilizers often discussed physical illness in addition to mental illness. Regardless, the data collected offers rich information on how healers conceptualize mental illness and how utilizers perceive traditional medicine as a practice. Finally, we did not interview Liberian Western practitioners so we are missing their perspectives on collaboration. Further research must take place in order to account for these perspectives when considering potential collaboration between traditional healers and Western physicians.

Conclusion

The 2009 National Mental Health Policy in Liberia proposes the collaboration of formal and informal heath care professionals, knowledge, and methods. Collaboration is particularly important for addressing current resource and practice deficits in mental health care as traditional approaches can be strengthened through research, clinical guidelines, and training programs (Sarris, et al., 2013). An approach to mental health care that includes both practices can benefit patients by providing necessary treatment while remaining culturally appropriate, respectful, and holistic (Ross, 2010; Atindanbila and Thompson, 2011). Additionally, the World Health Organization encourages this collaboration in national health care systems, as this facilitates information exchange and ensures the safety and efficacy of traditional medicine (Zhang, 2000). Professional tensions can be resolved through collaboration as well, such as inter-professional education, interdisciplinary collaboration agreements, and clinical mentorship of healers (van Rensburg, et al., 2016). Similar

collaboration has been recommended or implemented throughout the world including Malaysia, South Africa, China, and India (Razali, 1995; Ross, 2010; Bodeker, 2001).

While the Center of Excellence proposed in the National Mental Health Policy offers a strategy for achieving collaboration, a pilot Center may prove beneficial to mitigate this collaboration. Inviting a small number of Western and traditional practitioners to focus on professional collaboration has the potential to improve acceptability and accessibility while reducing stigma (Gureje, et al., 2015). Through increased collaboration, the two practices will have the opportunity to develop an appreciation for the other and recognize that different therapies are complementary and not competitive (Patel, 2011). If this pilot Center is effective and successful, it can be expanded to include more traditional healers and Western practitioners throughout Liberia.

Collaboration between traditional and Western medicine may prove challenging, but Liberia is well-situated for such change. From the perspectives of traditional healers and utilizers, there is clearly a space for traditional medicine in Liberian health care, and particularly for mental health care, where Western medicine is ineffective or inaccessible. Traditional healers have expressed a willingness to collaborate and improve their skills as health care providers and the pluralistic nature of Liberian culture is prepared to build collaboration between these practices. The next step is formalizing this process and generating a cooperative environment between traditional and Western practitioners.

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Appendix 1.: Interview guide

Thank you for agreeing to participate in this study. Our goal is to learn more about the treatments available for various illnesses in Liberia.

1. What are common problems that people in Liberia are dealing with after the war?
2. What do you think causes these problems?
3. Who do you go to for help with these problems? (names, titles, etc.)
4. What do these people do to help you?
5. Would you go to a doctor to help with these problems?
6. If yes, how does the doctor help with these problems?

7. If no, why not?

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Table 1.

Participant demographic information

	N (%)	Mean Age (years) (SD)
Healers (n=24)		52.3 (13.6) *
Females	9 (37.5)	47.8 (11.6) *
Males	15 (62.5)	54.5 (14.3) *
Healer Identification		
Bone Specialist	2 (8.3)	50.5 (13.4)
Herbalist	19 (79.2)	50.8 (14.4) *
Traditional Healer	2 (8.3)	60 (5.6)
Traditional Medicine Technician	1 (4.2)	
Utilizers (n=11)		32.3 (9.9)
Females	5 (45.5)	40.0 (8.6)
Males	6 (54.5)	24.5 (1.9)

* Does not include missing age data from 6 healers.