"*Medical treatments are also part of God's gift*": Holy water attendants' perspectives on a collaboration between spiritual and psychiatric treatment for mental illness in Ethiopia

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Ethical considerations

Ethical approval was granted by the Department of Psychiatry, College of Health Sciences, AAU. Written informed consent was obtained from all participants.

Abstract

Introduction

In Ethiopia, traditional and spiritual treatments, such as holy water, are used by people with mental disorders instead of, or alongside, psychiatric services. Collaborations between traditional and psychiatric providers may increase access to evidence-based treatments and address human rights abuses. This study aimed to explore the perspectives of holy water attendants on a novel collaboration between holy water and psychiatric care, at St Mary's Clinic, Entoto, Ethiopia and to characterize the users of this service.

Methods

Semi-structured interviews were conducted with 14 holy water attendants, who run group houses for holy water residents and are paid by family members. A thematic analysis was conducted. Socio-demographic and clinical data were extracted from the records of all patients who had attended the clinic.

Results

A total of 174 individuals have attended the clinic in the three years since it opened. The majority were diagnosed with schizophrenia. Holy water attendants provide a partial gatekeeping role to psychiatric care, selecting which of their clients they think will benefit and, for these individuals, facilitating attendance to the clinic and anti-psychotic medication adherence. Psychiatric care was felt to be compatible with holy water by some, but not all, attendants. However, family members often had the 'final say' in individuals attending the clinic, in some cases putting up strong resistance to using psychiatric care.

Conclusion

A novel collaboration is acceptable to some holy water attendants and may increase access to psychiatric care amongst people with mental illness living at a holy water site in Ethiopia.

249 words

Introduction

There have long been calls for collaboration between traditional and biomedical care providers in the delivery of physical and mental healthcare in low and middle income countries (LMICs). In settings with few specialists, all available resources, including non-specialists and traditional practitioners, should be harnessed to increase access to healthcare (Gureje et al., 2015). Informal links between religious healers and psychiatrists are not new to Ethiopia. In their 1968 ethnographic study of the Ghion holy water site, Giel et al. remarked "[*the holy water priest] sends some of his cases to the nearby health centre, and there is a two-way trickle of patients between his place and Emanual Mental Hospital in Addis Ababa"* (Giel et al., 1968). The Ethiopian government has recognized the potential role of traditional practitioners in mental health services (*National Mental Health Strategy 2012-2015*, 2012), but there are few examples of formal collaborations in practice (Kassaye et al., 2006).

In Ethiopia, health is traditionally understood as a, *"state of equilibrium among the physiological, spiritual, cosmological, ecological and social forces associated with a person"* (Vecchiato, 1993). Across Christian, Muslim and animistic faiths, explanatory models for mental illness in Ethiopia have traditionally focused on the supernatural, grouped into: (1) possession by evil spirits, resulting from behaviours such as walking alone in the woods; (2) punishment by normally benevolent guardian spirits (e.g. *Wuqabi*, *Zar*) for sins or broken taboos (for example, entering a long-closed room without blessing oneself) and (3) bewitchment or curses cast by individuals thought to possess powers, including *Kallicha* (Muslim) and *Debtera* (Christian) (Giel et al., 1968; Kahana, 1985; Kortmann, 1987; Mercier, 1997; Mulatu, 1999; Teferra & Shibre, 2012; Torrey, 1967). More recent accounts include psychosocial causes such as stress, poverty, and substance abuse (alcohol and khat) (Girma et al., 2013; Mulatu, 1999; Teferra & Shibre, 2012). A system of phenomenological classification exists in Ethiopia, which includes an illness that is conceptually equivalent to psychosis (Kortmann, 1987), typically described in terms of behavioural features, for example, disorganized speech or disrobing, rather than thought disorders (Alem et al., 1999; Shibre et al., 2010).

In Ethiopia access to evidence-based mental healthcare is limited to Amanuel Mental Specialized Hospital in Addis Ababa and a small number of outpatient clinics. Whilst mental health is being integrated in primary care in several pilot sites across Ethiopia (Fekadu et al., 2015), in rural settings, only 58% of people with psychosis report lifetime access to psychiatric care (Fekadu et al., 2019). In Addis Ababa, only 10% of street homeless with psychosis have ever accessed treatment (Fekadu et al., 2014). Family members are typically the main care providers for people with mental illness (Asher et al., 2017), whilst support from the community or non-governmental organisations (NGOs) is negligible (Fekadu et al., 2019). Traditional and religious healing is commonly sought; lifetime usage is 85% amongst people with psychosis (Fekadu et al., 2019). Around half of individuals who ultimately seek psychiatric care for mental disorders have previously attended traditional or religious healers (Bekele et al., 2009).

Holy water (*tsebel*) is believed to have curative properties; it is the most commonly used type of traditional or religious healing for mental illness (Bekele et al., 2009). Holy water is also commonly used to address physical illness or even minor social difficulties. Most Orthodox Christian churches have a holy water source attached, but some are particularly popular as healing sites**.** Holy water is free to use and accessible to anyone. For most attendees, the process is short and may involve splashing, bathing or drinking the water, and attending prayers led by holy water priests (Giel et al., 1968; Mercier, 1997). Those with more severe complaints, most commonly chronic mental illness, may reside nearby for months or years to use the facilities. These individuals are either accompanied by family members or holy water attendants (*astamami*). A range of other healers exist in Ethiopia, including *Debtera, Kalicha* and *Tanqway,* who to treat spirit possession through exorcism and rituals (Selamu et al., 2015).

There are several rationale for collaboration between traditional and psychiatric care providers, including first, to aid the early detection and treatment of mental illness, which may improve outcomes (Patel, 2015). Second, to minimise harmful practices, such as neglecting, restraining or physically abusing patients. A survey of 693 traditional and faith providers found that amongst people receiving care for mental illness, physical restraint was used in 4% cases in Kenya, 21% in Ghana and 63% in Nigeria (Esan et al., 2019). Third, to raise awareness amongst

psychiatric practitioners of the spiritual needs of people with mental disorders (Mulatu, 1999). And fourth, to capitalize on the powerful influence of traditional practitioners to reduce stigma and encourage community support for people with mental illness (Selamu et al., 2015). Potential tasks for traditional practitioners include detection and treatment of mental health problems, including monitoring of relapse, medication adherence and side effects, and referral to primary or secondary care (Gureje et al., 2015). Proposed models of collaboration include (i) task-shifting, whereby psychiatric treatments, for example psychotropic medication, are delivered by traditional healers, (ii) a collaborative model, whereby practitioners refer to each other or assess complex cases together (Campbell-Hall et al., 2010) and (iii) a fully integrated approach, where individuals are routinely offered both traditional and psychiatric treatments within the same consultation. In several African countries, traditional healers, clergymen and psychiatric care providers report being open to collaboration and recognize the benefits of receiving both types of care (Campbell-Hall et al., 2010; James et al., 2014; Musyimi et al., 2016; Solera-Deuchar et al., 2020). However other reports suggest that mutual distrust between traditional and psychiatric providers, stemming from skepticism of treatment efficacy and human rights concerns, may be a key barrier to collaboration (Green & Colucci, 2020; van der Watt et al., 2017). Despite being widely advocated, there are few descriptions of how collaborations have been established in practice, let alone how they are viewed or their components accessed (Read, 2019)(Gureje et al., 2015). Furthermore, little is known about the socio-economic or clinical profile of people who use collaborative treatment services.

Study context

Holy water site (spiritual care)

The study is set in Entoto, an elevated area on the northern perimeter of Addis Ababa, capital city of Ethiopia. There are two Orthodox Christian churches at Entoto, St. Mary's and St Michael's (see Fig. 1). Both churches have popular holy water sites within 30 minutes walk. The sites consists of several prayer compounds and separate buildings with piped holy water available at points around the walls. Ceremonies, involving prayer, baptism and the ordering of attendees to drink holy water, are conducted daily by the holy water priests. It is estimated that

at any given time approximately 250 and 500-700 people live around St Mary's and St Michael's holy water sites respectively, mainly in basic dormitory-style houses run by holy water attendants. Attendants undertake the role to generate personal income; they have no religious or healthcare training. They are paid by family members to support residents' attendance at holy water ceremonies, bathing and eating.

Psychiatric care

In December 2011 the Mental Health Society of Ethiopia began a psychiatric outpatient service at a primary care clinic at Entoto in collaboration with the Department of Psychiatry at Addis Ababa University (AAU) and with the approval of priests from St Mary's church. The Mental Health Society is an NGO that was founded by family members of people with mental illness and psychiatrists. The aims of the organization are to advocate for people with mental illness and to provide community-based mental health services. It is funded by donations from individuals, hospitals, universities and banks.

St Mary's Clinic, which now runs once a fortnight, was set up primarily to provide mental health care to the residents of the holy water site, however any person in need of mental health care can access the clinic. Psychiatry residents from AAU conduct a full psychiatric evaluation, prescribe appropriate medication, including anti-psychotics, mood stabilizers and anti-depressants and provide psychoeducation. There are no other psychosocial interventions, nor any treatment for substance use disorder, available at St Mary's clinic. The clinic is coordinated and funded by the Mental Health Society of Ethiopia and all medications are provided free of charge. Patients can be referred to outpatient clinics in central Addis Ababa or inpatient services at Amanuel Hospital, where alcohol detox and limited psychosocial treatments are available; however in practice such referrals are uncommon.

Collaboration between spiritual and psychiatric care

In 2011 psychiatrists from AAU met with high-level clergymen from the Ethiopian Orthodox Church to raise awareness of the needs of people with mental illness and to negotiate for a

collaborative approach. With the agreement of church leaders, psychiatrists made field visits to Entoto to observe the holy water rituals and identify the needs of holy water users. Stigma, physical and verbal abuse towards holy water users and physical restraint by the attendants was observed. Consultative meetings were subsequently held between psychiatrists and St. Mary's Church priests. Despite disagreement relating to explanatory models for mental illness, an agreement was made to collaborate as there was universal recognition of the unmet needs of some holy water users. A training manual was developed for holy water priests and attendants adapted from a manual for support workers of homeless people with mental illness in Addis Ababa (Fekadu et al., 2014). Holy water priests and attendants attended workshops covering the nature of mental disorders, clinic services, stigma and discrimination, and how to respond appropriately and safely to aggressive behaviour. The collaboration was publicised in print media and local radio. Holy water attendants typically accompany patients to the clinic, but there is no structured referral system. Use of the clinic, including patient flow and characteristics of service users, has not been systematically assessed previously.

Study aim

The primary aim of this study was to explore the role of holy water attendants and their perspectives on a collaboration between holy water and psychiatric care in Ethiopia. To contextualize these findings, a secondary aim was to characterize the users of this service. This information is needed to guide services to best meet the needs of current and potential users.

Methods

Study design

A mixed methods study was carried out. The main component was a qualitative study of the holy water attendants' role and attitudes towards St. Mary's clinic. In addition, we conducted a descriptive evaluation of numbers and characteristics of patients attending the clinic.

Qualitative study

Data collection

To gather information on the site layout and activities and the holy water attendants' role, XX conducted three visits to St Mary's and St Michael's holy water sites and held meetings with members of the St Mary's church clergy, the holy water attendants' union leader and the Mental Health Society coordinator. Semi-structured interviews were conducted with 14 holy water attendants in September and October 2014. Attendants were sampled purposively to ensure balance for (i) base at St. Mary's and St. Michael's sites, (ii) previous attendance and non-attendance to clinic, (iii) those bringing new and follow-up patients and (iv) gender. It was anticipated that some attendants would have attended the AAU training, but this was not an inclusion criteria. The study focused on attendants as it was hypothesised this group would influence clinic attendance.

Holy water attendants were identified when they attended the clinic with patients or through the clinic coordinator. Snowballing was used to identify additional potential participants in two stages. First, by asking attendants who had attended the clinic to suggest colleagues who did not typically attend. Second, by asking these attendants to suggest others who also did not bring clients to the clinic. Participants were approached by telephone or face to face. One potential participant declined due to having insufficient time. Interviews were structured using a topic guide, which covered the attendants' role, attitudes towards the clinic and decision-making around bringing patients. The topic guide was translated into Amharic prior to use. The interviews lasted a mean of 35 minutes. The interviews were conducted in Amharic by XX, a female psychiatry resident with training in qualitative research methods. Interviews were audio

recorded with supplementary hand-written notes. Interviews were conducted in a private room at the clinic. XX and XX discussed initial impressions and made minor amendments to the topic guide as the study progressed. Transcription and translation to English of the recorded material was carried out.

Data analysis

A thematic analysis was conducted. Thematic analysis is a method which can draw on both a realist approach (involving the description of experiences) and a constructionist approach (involving consideration of how those experiences reflect wider societal discourses)(Braun & Clarke, 2006). An inductive (data driven) approach to identifying themes was employed; we did not consider the data with an a priori coding frame. Four of the transcripts were first independently coded by two investigators (XX and XX). Differences in the coding framework were discussed and a final coding framework was agreed. The remaining transcripts were then coded manually by XX using the agreed coding framework, adding additional codes as required by the data. XX collated the codes into potential themes, by seeking repeated patterns of meaning across the dataset (Braun & Clarke, 2006). Differences in experiences and views between participant types were noted, for example between those who had and had not attended the clinic. XX created a thematic framework, which was discussed and agreed with XX. Finally, XX reread a selection of the full transcripts to confirm that the final thematic framework adequately reflected the data collected. Quotes were selected by XX and XX to exemplify each theme.

Description of outpatient clinic attenders

We conducted a secondary data analysis of routine medical records at St Mary's Clinic. These records were originally completed by psychiatry residents for all clinic attenders. At first clinic attendance psychiatry residents record a diagnosis, using DSM-IV criteria, based on the history and mental state examination. At subsequent clinic attendances psychiatry residents ascertain whether there has been clinical improvement, by comparing current symptoms, self-care and risk assessment, against the previous assessment. The medical records of all patients who had attended the clinic since it opened were reviewed by XX, covering the period from December 2011 to July 2014. Socio-demographic and clinical data (including diagnosis and treatment) were

extracted from patient records and recorded on a data extraction sheet. 'Clinical improvement' was determined by the subjective assessment of the clinician, where this was documented in the notes. We anticipated that not all holy water site residents would attend the clinic, but that the majority of clinic attenders would be holy water site residents. A simple descriptive analysis was undertaken using SPSS software. The number of patients with missing data for each variable was indicated.

Results

Description of clinic attenders

One hundred and seventy four patients attended the clinic between December 2011 and July 2014. The mean number of patients per clinic session increased from seven in 2012 to 25 in 2014 (Table 1). There were large amounts of missing data for socio-demographic and clinical variables. Patients were mainly men (79.3%) and the majority were 20-39 years (76.5%) (Table 2). Over half came from Addis Ababa and nearly 90% were educated. The majority were Orthodox Christian (87.9%), with minorities of Protestant Christian and Muslim attenders. Most patients attended St. Michael's holy water site (86.9%), with only 13.1% from St. Mary's site. Around two thirds of patients were accompanied to the clinic by the holy water attendants, 27.6% were accompanied by family and 6.9% were accompanied by both. Only four patients were not living at the holy water site. Amongst those living at the site, 48% stayed for less than one year, 25% stayed between one and five years, and 18.1% stayed for more than five years (see Table 3).

The most common diagnosis was schizophrenia (73.3%), whilst a minority had bipolar disorder, substance use disorder or major depressive disorder (Table 4). Nearly half had previously received treatment at Amanuel Mental Specialized Hospital. Since first coming to the clinic, most

were seen four or more times (78.8%). Around three quarters had experienced some clinical improvement whilst attending the clinic.

Qualitative findings

Thirteen male attendants and one female attendant (the only female attendant at either site) were interviewed. St. Michael's and St Mary's holy water sites were equally represented. Nine of the included attendants had ever brought patients to clinic whilst five had not. Of those that had brought patients to the clinic two of them were attending for the first time. Nine had previously attended the AAU training.

Four main themes were identified: the role of holy water attendants, attitudes towards psychiatric treatment, decisions about use of psychiatric treatment and potential service improvements

Theme 1: Role of holy water attendants

Experience and workload

The majority of the attendants had originally come to the holy water site for treatment of their own physical or mental illness, and had later taken on their current role. For some participants their illness experiences led them to treat their patients with empathy.

> *"For four years, I was leading a painful life. I went to different hospitals and health centres then I came here and I recovered. That is why I take care of the patients just like I would myself" (A12, clinic non-attender)*

Attendants reported supporting between five and ten patients. An attendants' union reportedly ensures the patients are being fed, cleaned and are not subject to physical or sexual violence. However it was not clear how this was enforced. Attendants reported that patients' families typically visit once a month to pay the attendant and supply money for their relative's food. Some attendants described supporting destitute patients without charge. According to attendants, their services include the following components.

Support to meet daily needs

Attendants described taking patients to the nearby river weekly to maintain personal hygiene and wash clothes, and buying and preparing their food. Inadequate food supply was usually due to the family having insufficient means or because the family reportedly wished to punish the patients for using alcohol or khat. In some cases food intake was restricted due to fasting practices that are traditional at holy water sites.

> *"If the family can afford it then they will also pay for breakfast. It depends on the family, since the majority of the patients come for addictions the family do not want them to be comfortable" (A10, clinic attender)*

Support to attend holy water rituals

Attendants reported accompanying patients to the baptism area and church on a daily basis. Priests were not involved in the daily activities of the patients or attendants, nor in discussions about the patients' treatment or progress.

> *"We don't discuss about patient's treatment [with the priests]. [The priests] are doing their church service only. We go to the church service, let the patients be baptized, attend ritual congregation and hear their preaching. Beyond this we do not have much interaction" (A9, clinic attender)*

Restraining patients

The attendants expressed a sense of responsibility towards their patients, ensuring that they stayed in their compound, and that they do not wander off during the journey to the holy water site or clinic. Most attendants reported physically restraining their patients, usually with iron chains. The main rationale for this was the perceived risk of patients escaping, which was thought to be likely because the majority of patients had been brought to the holy water site against their will. It was felt that people with substance use problems were at particularly high risk of escape.

> *"I thought instead of them wandering off all day and night and be attacked by hyenas or going into a ditch I should chain them up" (A4, clinic non-attender)*

Some attendants were fearful of being harmed, and in some cases the family requested that their relative be restrained, either due to fear of violence or to punish them for substance use.

> *"there is one [patient] who killed a person and served 12 years in prison and then came here. Sometimes he runs away and goes home but his family members leave because they are scared" (A10, clinic attender)*

Support to access psychiatric care

The attendants who had brought patients to the clinic reported keeping the patients' medication for them and ensuring it was taken at the right time.

> *"I take their medicine from the clinic and make them take it exactly as they should take it. I keep the medication with me for safety and to remind them to take it" (A9, clinic attender)*

A minority of attendants reported forcing the patients to take the medication. Attendants also had a gatekeeping role with regards to accessing the clinic, making recommendations to the patients' family on who should attend. Attendants typically brought only one or two of their patients to the clinic, with only one attendant bringing nine patients.

> "*I try to convince the patient's family about the importance of medical treatment and how the patients could easily recover if they took medical treatment… I explain to them that even if complete healing may not be expected, there will be improvement. They will become at least self-aware" (A14, clinic attender)*

Theme 2: Attitudes towards psychiatric treatment

Positive perspectives towards combining spiritual and psychiatric treatment

Attitudes towards psychiatric treatment varied. The majority of clinic-attenders related that they are keen to bring patients to the clinic, reporting that medication makes violent and restless patients calmer and sleep better, which makes their job easier. These attendants emphasized that both psychiatric and holy water treatments are a gift from God. Several

attendants believed that holy water treatment and psychiatric treatments complement each other and some reported that both types of treatment were endorsed by the Orthodox Christian Church. Some attendants reported that taking patients to Amanuel Mental Specialized Hospital was challenging if they were restless or violent, and taxi drivers would often refuse to take them. The proximity of the clinic to the holy water site was therefore perceived as a benefit. Some attendants felt that if you are a strong believer, God will help you no matter what type of treatment you seek. These attendants had tended to try holy water treatment initially, only seeking psychiatric treatment if there was no improvement.

> *"I can see real changes when it [medication] is combined with the holy water. It might not work alone but, when it is with the will of God (holy water) it is working very well" (A5, clinic attender)*

> *"We are recommending that both treatments are good for patients. Medical treatments are also part of God's gift. Medicine is an invention of human wisdom that is given by God. Every disease has its own nature. I believe that some diseases need medical treatments. At the same time there are some health problems that are solved only by spiritual treatment. Thus, I believe in the importance of both treatments" (A3, clinic attender)*

Negative attitudes towards psychiatric treatment

In contrast some attendants who had not brought patients to the clinic stated that taking medication is akin to doubting the work of God. It was felt that this would offend God and render the holy water treatment powerless.

> *"Combining both spiritual and medical treatment is not recommended. I know a lot of people who recovered from their illness through spiritual treatment without using medications. I strongly advise patients to be firm in God and take only spiritual treatment." (A7, clinic non-attender)*

Impact of training on attitudes

Most of the attendants reported that they became aware of the clinic through training delivered by AAU. Training had changed their attitudes towards psychiatric treatment, increased understanding of the importance of medication adherence and potential side effects, and encouraged them to reduce physical restraint and beating.

> *"I gained skills in how to handle patients who are violent and turbulent who often pose risks to themselves and others. I gained skills in how to systematically handle them and let them refrain from risky acts" (A3, clinic attender)*

Theme 3: Decisions about the use of psychiatric treatment

Distinction between spirit possession and mental illness

Attendants tended to make their own judgements about who may or may not benefit from treatment at the clinic. In general, attendants brought patients who they considered to have a mental illness, but not those with substance misuse problems or who they perceived to be possessed by evil spirits. This finding is corroborated by the case note review, which found only 4.2% of clinic attenders were diagnosed with substance use disorder. Attendants reported being able to easily differentiate between mental illness and spirit possession, mainly through the response to being baptized in the holy water. Attendants reported that those who are possessed by evil spirits often behave normally except during a baptism, when they may scream and shout, try to escape, and speak rapidly about unrelated topics.

> *"A patient with evil spirits shouts, talks too much and utters irrelevant things when he is baptized. They don't want to hear about and get a treatment of the spiritual type" (A4, clinic non-attender)*

In some cases the evil spirit, speaking through the patient, was thought to directly refer to the psychiatric treatment.

"Sometimes when patients are being baptized the evil spirit might say that "I deliberately rendered the medicine ineffective for the patient" or "I am deliberately making the patient take medication so that I will govern my evil empire" (A10, clinic attender)

The attendants also reported that those who are possessed by evil spirits often went to great lengths to avoid baptism in holy water.

"They will use all their energy to escape from the baptizing area. The energy and force they exert while being baptized is incomparable with the person's energy and character while they are normal" (A12, clinic non-attender)

A few attendants also reported that patients possessed by evil spirits exhibited uncharacteristic behaviour at other times, such as being violent or cruel to animals and people. Finally, spirit possession might also present like a physical illness, such as rendering individuals weak and unable to work or take care of themselves. The prevailing belief was that substance misuse problems, including khat and alcohol misuse, are self-inflicted; a minority of attendants believed that substance misuse arose from spirit possession. It was reported that treatment should therefore involve physical restraint, to reduce access to the substance, as well as spiritual treatment to gain the strength to abstain.

"drug addiction is a manifestation of evil spirit. When he or she is baptized they begin shouting and talking too much. And this is taken as a confirmation of the fact that a drug addict is actually a victim of evil spirits" (A6, clinic non-attender)

Identification of mental illness and use of psychiatric treatment

The attendants described several behaviours that they associated with mental illness, including talking and laughing alone, collecting garbage, singing songs inappropriately, incoherent speech, muteness, forgetfulness and inability to self care. They also described cases of urinary and faecal incontinence, a lack of awareness of the environment and an absence of meaningful activity. Unlike those thought to have spirit possession, it was reported that those with mental illness would not typically scream during baptism. Whilst for some attendants any evidence of mental illness was sufficient cause to recommend psychiatric treatment, for many violence and sleep

problems were the main impetus. In some cases attendants identified mental illness through a history of previous medical treatment.

> *"Those patients, who are a victim of mental disorder talk too much, collecting dirty substances, do not keep their hygiene and try to escape. They also talk and laugh alone. They do not control themselves" (A5, clinic attender)*

> *"When patients don't improve after long time of treatment, don't scream during baptism, collect garbage and speak incoherently then we consider him or her mentally ill" (A4, clinic non-attender)*

Role of family members in decisions about source of care

Although attendants were highly influential in determining who accessed the clinic, in many cases it was the family members who ultimately made the decision. Resistance from family members was cited as the main reason that some patients are not brought to the clinic by attendants, despite their encouragement. The attendants reported that many families believe that healing can only come from God and that medication will not be helpful. Most families were reportedly also weary of psychiatric treatment; their relatives had often taken it for several years whilst experiencing side effects but no improvement. It was reported that some families found it difficult to accept their loved one had a mental illness. According to some attendants, healing by holy water was more acceptable to the family as well as society.

> *"The families of the patient are the sole decision makers on whether the patient should attend the clinic or not. Normally, we inform the families of a patient about the clinic. We tell them it is nearby and given for free. However, some families are conservative. They believed that taking medicine will make the patients sedentary. However, we cannot force them. If the family is willing, we [the attendant and the patient] will come to the health service. Most of the challenges come from mothers." (A1, clinic attender)*

Theme 4: Potential service improvements

Some attendants recommended improved availability of anti-psychotic medication at the clinic. Attendants sometimes found there was no free medication in stock, and they were required to purchase it from private pharmacies. This was challenging as they had typically already informed family members that medication would be free of charge. Some attendants also expressed a preference for risperidone as an alternative to chlorpromazine, because of the better side effect profile.

> *"There is inaccessibility of medicine in this clinic. When patients take the red medicine their body shakes and their necks bend. Risperidone is a good medicine for the patients" (A2, clinic attender)*

Several attendants asked for more training. Those who had already received AAU training felt they had benefited and would like a refresher, whilst some of those who had not attended voiced a desire for new knowledge.

> *"Some of the attendants benefited from participating in this training. However, others forgot the points made at the training and hence failed to implement it. I suggest that trainings should be given again to all attendants" (A14, clinic attender)*

All of the attendants from St. Michael's site requested a clinic be established near St. Michael's church. For these attendants the one hour journey through the woods to the St Mary Clinic was challenging and there was a perceived risk that patients could abscond.

Discussion

Summary

This exploratory study provides novel insights into how different models of care are viewed and used in the context of a psychiatric-spiritual collaboration in Ethiopia. Overall the qualitative and quantitative data suggest the clinic is running successfully. Quantitative findings showed that the majority of patients made several visits and numbers attending have increased over the three

years since it opened. The most common mental disorder amongst clinic attendees was schizophrenia. The vast majority of clinic attendees were resident at the holy water site and over one third had lived there for more than one year. Qualitative data showed that holy water attendants provide daily care for people with mental illness, whilst the only contact with holy water priests is during baptism. Holy water attendants also provide a partial gatekeeping role to psychiatric care, selecting which of their clients they think will benefit and, for these individuals, facilitating attendance to the clinic and anti-psychotic medication adherence. The psychiatric service was felt to be compatible with holy water by some, but not all, holy water attendants. However, family members often had the 'final say' in individuals attending the clinic, in some cases putting up strong resistance to using psychiatric care.

Findings in context

There are few other examples of functioning collaborations between traditional and psychiatric care providers in LMIC. The collaborations that do exist tend to use a 'co-location' model, where different treatment modalities are offered on the same site. Whilst the parallel use of traditional and psychiatric treatments are accepted by psychiatric providers as appropriate, or even desirable, the main direction of referral is often from traditional treatment to psychiatric treatment, rather than vice versa (Green & Colucci, 2020). This ethos broadly reflects the approach at St Mary's Clinic. As part of a randomized controlled trial (RCT) in Ghana, psychiatrist-led care, comprising psychotropic medication, was offered alongside faith healing at a prayer camp. People with severe mental illness who received the additional psychiatric care experienced reduced symptoms after six weeks compared to those receiving only faith healing (Ofori-Atta et al., 2018). Participants were randomized to intervention arms, and the reasons why eight out of 71 participants randomized to psychiatric care did not receive this intervention were not reported. Comparison with our findings, in terms of understanding the rationale behind accessing different forms of care, is therefore difficult. An informal collaboration in Ghana, in which traditional healers identify potential mental illness in their patients and request psychiatric nurse-led treatment with depot injection, is reportedly acceptable to patients, healers and nurses (Yaro et al., 2020). A further RCT in Nigeria will

evaluate the effectiveness of primary healthcare providers visiting traditional healing sites to support clinical management of people with psychosis (Gureje et al., 2017). Apparently scarce are truly collaborative care models, in which there are balanced two-way referrals, and fully integrated models in which providers work together in diagnosis, treatment planning or delivery. At the Dawa-Dua ('prayer-treatment') in India, a psychiatric clinic has been established in the grounds of a large shrine. Faith healers refer clients to the clinic if they detect mental health problems; and psychiatrists refer back to the healers for ongoing spiritual needs. Mutual trust and the equal value placed on the two forms of care are reportedly key to the collaboration's successful functioning (Shields et al., 2016).

In our study, in common with accounts from Southern Ethiopia, holy water attendants distinguished between individuals afflicted by spirit possession and mental illness (Alem et al., 1999) based on behaviours observed during baptism. Echoing some of the earliest accounts of faith healing in Ethiopia in the scientific literature (Giel et al., 1968), there was consensus that those identified as being possessed should exclusively receive holy water. Only those assessed to have mental illness were felt to gain benefit from psychiatric treatment, and were therefore brought to the clinic. It is difficult to directly map the attendants' classification against psychiatric taxonomy, particularly as baptism behaviours were not witnessed by the investigators. However some behaviours associated with spirit possession (such as rapid irrelevant speech), could conceivably be indicative of a psychotic or dissociative illness. It is generally accepted that hallucinations and delusions associated with schizophrenia are 'pathoplastic', meaning that whilst the form is universal, the content is shaped by cultural meanings (Dein, 2017). Conversely, these experiences may not represent any type of mental illness; yet it is noteworthy that these individuals were considered in need of 'treatment' in the form of holy water to the extent their families had left them at the site. Amongst those identified as having mental illness, some attendants felt that both medication and holy water are helpful. A unifying explanatory framework- that both treatments are created by God- provided a coherent picture of why both treatments could help. Attribution of the success of both spiritual and psychiatric treatment for psychosis to the healing power of God has also

been found amongst religious healers in Uganda (Teuton et al., 2007) and mental healthcare workers in Ghana (Read, 2019).

In rural Ethiopia alcohol use disorder is common, particularly amongst street homeless (Ayano et al., 2017; Fekadu et al., 2014), but it is highly stigmatized and rarely treated (Zewdu et al., 2019) . Attendants described the increased tendency to physically restrain and restrict food for this group, echoing the association between traumatic experiences, including assault, and comorbid mental illness and substance misuse in rural Ethiopia (Ng et al., 2019). Furthermore, attendants generally perceived substance abuse problems to be unsuitable for psychiatric care and only a small minority of clinic attenders were diagnosed with substance use disorder (4.2%). For some attendants spirit possession was thought to underlie addiction, meaning spiritual treatment was most appropriate. For others, substance abuse occupied a third category, distinct from either spirit possession or mental illness, and uniquely, was considered to be self-inflicted. These findings may partly reflect Indian research identifying psychosocial factors as common explanatory models for substance use disorders, whilst psychiatric disease models are considered less relevant (Nadkarni et al., 2013). Alternatively, the low numbers attending St Mary's Clinic with such disorders may represent the correct assumption that available treatment for such disorders is limited in this context.

Willingness to engage with psychiatric care was mixed amongst attendants. In other settings resistance of healers to collaboration with psychiatric care stems from concerns around loss of business (Morgan et al., 2015), feeling effectiveness is undermined (Gureje et al., 2015) and a mutual sense of distrust (van der Watt et al., 2017). In contrast, the main concern in this study appeared to be around incompatibility of beliefs. This may be because holy water attendants would continue to receive payment, even if both psychiatric treatment and holy water were used, and holy water priests are not paid at all. As holy water attendants are only conduits for using holy water, concerns around being undermined by psychiatric approaches are less relevant. In fact some attendants were highly motivated to use the clinic by potential improvements in their working conditions, such as reduced risk of difficult behaviour.

Aside from their role in baptizing attenders, and in common with previous reports (Giel et al., 1968), holy water priests do not have a therapeutic role with people with mental illness. Furthermore priests and psychiatrists had little say in who receives which services. Instead holy water attendants and family members were most influential. The powerful influence of the family in decision-making about care, and the limited role of people with mental illness in making their own choices, has been noted previously in rural Ethiopia (Souraya et al., 2018). In our study, in common with findings from Ghana and Ethiopia (Hailemariam et al., 2017; Read, 2012), family members' treatment preferences were reportedly influenced by pragmatic concerns around medication side effects and inefficacy. At the study site both holy water and psychiatric treatment were free, which may explain why medication concerns were more important than better affordability and payment flexibility, which have been posited as explanations for the popularity of traditional healing in other contexts (Gureje et al., 2015; Kassaye et al., 2006). Similar to reports from Haiti, differing explanatory models amongst service users or their families did not appear to be a primary barrier to using psychiatric care (Khoury et al., 2012). The parallel use of spiritual and psychiatric treatments identified in this study aligns with previous findings from Ethiopia (Alem et al., 1999) (Teferra & Shibre, 2012), Ghana (Read et al., 2009) and India (Quack, 2013) indicating that help-seeking behavior tends to be shaped by a desire to get well, irrespective of the means by which this is achieved.

The large minority of clinic attendees from outside Addis Ababa may indicate that holy water is perceived as an important source of care given that people are willing to travel long distances to access it. The fact the majority had received a formal education, and over a third higher education, may suggest holy water is acceptable and used across the social spectrum (Gureje et al., 2015); however the socio-demographics of clinic attenders may not reflect the wider group of holy water users.

Strengths and limitations

A strength of the qualitative study was the purposive selection of holy water attendants who had never brought people with mental illness to the clinic, as well as those who had. However,

some participants may have been vulnerable to social desirability bias, therefore overstating their support for the clinic, particularly as the interviewer (XX) was a psychiatrist. Another limitation is the inclusion of only holy water attendants. The views of people with mental illness, family members, psychiatrists and holy water priests, who also have important roles in the way the collaboration functions and is used, remain unknown. A comprehensive review all clinic attendees since its inception was conducted, giving a useful picture of patient socio-demographic and clinical characteristics. However, there were substantial amounts of missing data and validated clinical outcome measures were not used.

Implications

Overall, this study suggests that implementing a psychiatric clinic in close proximity to a holy water site is a potentially acceptable and feasible way to increase access to evidence-based mental healthcare irrespective of socio-economic status, and particularly for people with schizophrenia. That there is growing demand for St Mary's clinic suggests the needs of people with mental illness are not being entirely met through other mental health services or through holy water treatment. This co-location approach may be applied at other holy water sites in Ethiopia, or adapted for similar traditional or faith healing centres in other countries. Critical success factors may be the careful relationship building prior to initiating the collaboration, the clinic location being a respectful distance from the holy water site, the sensitization and training of holy water priests and attendants and the provision of free antipsychotic medication. Yet whilst there is a shared guiding principle that spiritual and psychiatric treatments may be delivered in parallel, the one-way referral system arguably means that the St Mary's Clinic model cannot be considered truly collaborative. It is possible that more balanced collaboration between the clinic and holy water site could improve engagement by holy water attendants and result in more holistic care for patients. Alternatively, in the context of holy water, a more integrated model may not be practical, necessary or desired by stakeholders, given that nearly all clinic attenders are already using holy water and holy water priests do not have a direct therapeutic role. Future research will explore the appetite for, and practicalities of, more mutual collaboration amongst holy water priests, psychiatrists, attendants and service users. An important finding was the perceived incompatibility of psychiatric and spiritual treatment

expressed by some attendants. Irrespective of the degree of integration, psychiatrists should be cognisant of the range of explanatory models and the potential importance of spiritual treatment for service users and family members. Future collaborations should continue to be mindful of imposing treatment choices on people with mental illness, attendants, family members and holy water priests.

Whilst some attendants who had received the AAU training were less likely to restrain clients who had received psychiatric treatment, other attendants continued to physically restrain their clients. A minority also reported forcing patients to take medication. Collaboration with attendants who are employing harmful practices may present ethical issues for treating psychiatrists (Read, 2019). The ongoing use of restraint may be due to pervasive stigma, fears for safety and the reality that attendants are being paid by, and are accountable to, family members. It is common for people with severe mental illness to be physically restrained in community settings in Ethiopia, often by family members (Asher et al., 2017). Whilst one spiritual- biomedical collaboration in Ghana reportedly resulted in reduced chaining by healers (Yaro et al., 2020), the Ghana RCT found that prayer camp residents continued to be restrained by staff, despite receiving anti-psychotic medication and experiencing symptomatic improvement (Ofori-Atta et al., 2018). These findings suggest that if collaborations with traditional healers are to be effective in addressing human rights abuses, as well as increasing access to evidence-based care, there needs to be a deep understanding of the rationale for existing practices and willingness to consider the concerns and beliefs of all actors (Kpobi & Swartz, 2019).

In this study mainly individuals with disorganized behaviours were identified by attendants as candidates for psychiatric care and the quantitative results show that St Mary's clinic is being used to treat psychotic illness. However, the selection of this group from a wider pool of holy water attenders may account for the lower than expected number of clinic attenders; there were 174 clinic attenders in three years from a resident holy water population of several hundred. In particular, whilst the holy water site may represent a relatively safe space for those with substance use disorder who would otherwise be street homeless, there is a substantial

unmet need for substance misuse treatment. Moreover, individuals with co-morbid substance use disorder and psychotic illness may be less likely to access treatments for psychosis, which are currently available at the clinic. Training for holy water attendants should clarify the range of presentations, including negative psychotic symptoms, mood symptoms and substance abuse, that may benefit from psychiatric care. The endorsement of psychiatric care by the Orthodox Christian Church, the notion that holy water and medical treatments are both gifts from God and the potential positive impact of psychiatric treatment on working conditions, should also be emphasized in training.

It has been suggested that better family and community support for people with mental illness in LMIC might account for the apparently superior clinical accounts in these settings (Cohen et al., 2008). That it is a common practice to leave people with mental illness at holy water sites under the care of attendants, sometimes for years, suggests some family members are not willing or able to act as long term informal caregivers. This is supported by several studies from Ethiopia and other LMIC highlighting the heavy burden on family caregivers including financial burden, stress and stigma (den Hertog & Gilmoor, 2017; Koschorke et al., 2017; Shibre et al., 2003). This strengthens calls for mental health interventions to focus on increasing the quality of family support (Asher, Fekadu, et al., 2018). An alternative explanation for the long duration of stay is that the strength of the families' faith is such that they are willing to wait long periods for healing to occur (Read et al., 2009). To distinguish between these possibilities further research should involve family members' perspectives.

Desirable clinic developments include expanding treatment for substance use disorder, such as motivational interviewing, and improving medication supplies. Psychosocial interventions are likely to be beneficial given the chronic and disabling nature of mental disorders encountered. However, the feasibility of such developments is limited given the low numbers of specialist mental health personnel and potentially unsustainable medication funding. Whilst non-specialist provision of psychosocial support for psychosis is likely to be acceptable in rural Ethiopia (Asher, Hanlon, et al., 2018), such service developments require funding and supervision infrastructure which are not currently available. Furthermore, attractive models of

care such as community-based rehabilitation rely on mobilizing family and community networks to promote awareness, to provide support and promote recovery (Kohrt et al., 2018). These approaches may be unfeasible for holy water sites, where residents are living away from their own social networks for long periods. Perhaps more realistic is to consider how the role of holy water attendants can best be developed. There was initial evidence that attendants could support medication adherence, and this could be expanded at St Mary's clinic and replicated elsewhere. The possibility of coercion highlighted in this study has been identified amongst non-specialist providers and family members in previous research in Ethiopia (Souraya et al., 2018) . As Read highlights, with reference to the use of physical restraint by traditional healers, "In promoting collaboration between mental health workers and traditional and faith healers, there is little acknowledgement of the potential irony of transferring persons from one form of coercion to another." (Read, 2019). Training for attendants in how to support medication adherence whilst respecting human rights could include how to discuss the advantages and disadvantages of medication, how to identify and address side effects as well as practical guidance on incorporating medication into daily routines (Asher, Hanlon, et al., 2018).

St Mary's clinic provides free anti-psychotic medication, which is not routinely available in Ethiopia. Difficulties paying for medication and unreliable medication supplies are known to be key barriers to accessing mental healthcare in Ethiopia (Hailemariam et al., 2017). An unintended consequence of free medication provision at a holy water site might be to change patterns of help seeking, such that families may be more likely to send relatives with mental illness to these sites. Living away from family networks for extended periods may impede recovery. Psychiatric -traditional collaborations should be implemented alongside efforts to increase access to mental healthcare in primary care in general, including anti-psychotic medication. In addition provision of psychosocial rehabilitation in service users' own communities may reduce the need for long stays at holy water sites which go beyond a desire for spiritual healing and instead represent an unmet need for long term care.

Conclusion

The co-location of a psychiatric clinic at a holy water site may increase access to evidence-based care for people with mental illness in Ethiopia. The collaboration is acceptable to some holy water attendants, who provide care for people with mental illness at such sites and act as gatekeepers to psychiatric care. Family members also have a powerful influence on which holy water residents utilise the clinic. The majority of clinic attendees suffer from psychotic disorders. Whilst substance abuse appears to be a common problem amongst holy water residents, and these individuals may be more likely to suffer human rights abuses, the clinic is rarely used for treatment of substance use disorders. The St Mary's Clinic model may be adapted for healing sites elsewhere in Ethiopia and other LMICs. Future clinic developments could include increasing provision of substance misuse treatments and formalising adherence support by attendants. Future research should aim to understand the views of service users, holy water priests and family members in how and why the clinic is used, and how the collaboration can be developed, as well as evaluating clinical and functional improvements amongst clinic attendees.

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Table 1 Clinic attendance by year

Year	Total patients seen in clinic*	Mean number patients per clinic session
2012	124	7
2013	309	17
2014 (to end of July)	551	25

*Patients may be seen on more than one occasion

Table 2 Sociodemographic characteristics of clinic attendees

Variable	N	%
Sex		
Male	138	79.3
Female	36	20.7
Age (years)		
<20	6	3.7
20- 39	124	76.5
40- 60	32	19.8
Missing	12	
Usual residence		
Addis Ababa	58	61.7
Out of Addis	36	38.8
Missing	80	
Religion		
Orthodox	72	87.8
Muslim	4	4.9
Protestant	6	7.3
Missing	92	
Any formal education		
Yes	86	89.6
No	10	10.4
Missing	78	

Level of education		
Elementary school	22	26.2
High school	32	38.1
Higher education	30	35.7
Missing	90	

Table 3 Pattern of holy water use amongst clinic attendees

Variable	**N**	**%**
Holy water site attended		
St. Michael	62	86.1
St. Mary	10	13.9
Missing	102	
Who accompanies attendee to the clinic		
Holy water attendant	76	65.5
Family	32	27.6
Both	8	6.9
Missing	58	
Living at the holy water site		
Yes	118	96.7
No	4	3.3
Missing	52	
Duration of stay at holy water site		
<1 year	48	48
1-5 years	22	22
>5 years	16	16
Missing	74	

Table 4 Diagnosis, outcome and medication adherence amongst clinic attendees

Variable	N	%
Diagnosis		
Schizophrenia	121	73.3
Schizoaffective disorder	12	7.3
Bipolar disorder with psychotic features	14	8.5
Substance use disorder	7	4.2
Major depressive disorder	8	4.8
Seizure disorder	1	0.6
Mild mental retardation with behavioural disturbance	1	0.6
Mental retardation +cerebral palsy+ seizure disorder	1	0.6
Missing	9	
Previous medical treatment		
Yes, at Amanuel Specialized Mental Hospital	46	48.4
Yes, at other unspecified location	12	12.6
None	37	38.9
Missing	79	
Total number visits to clinic		
1	4	3.8
2	12	11.5
3	6	5.8
4	82	78.8
Missing	70	
Symptom improvement since first clinic attendance		
No improvement	12	12
Some improvement	76	76
Full improvement	12	12
Missing	74	
Anti-psychotic medication adherence		
Takes medication some days	24	25.5
Takes medication every day	70	74.5

Missing	80	
Lost to follow up after first clinic attendance		
Yes	42	24.1
No	132	75.9
Missing	0	