Feature

Integrating Mental Health and HIV Services in Zimbabwean Communities: A Nurse and Community-led Approach to Reach the Most Vulnerable

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Alcohol use and depression negatively impact adherence, retention in care, and HIV progression, and people living with HIV (PLWH) have disproportionately higher depression rates. In developing countries, more than 76% of people with mental health issues receive no treatment. We hypothesized that stepped-care mental health/HIV integration provided by multiple service professionals in Zimbabwe would be acceptable and feasible. A three-phase mixed-method design was used with a longitudinal cohort of 325 nurses, community health workers, and traditional medicine practitioners in nine communities. During Phase 3, 312 PLWH were screened by nurses for mental health symptoms; 28% were positive. Of 59 PLWH screened for harmful alcohol and substance use, 36% were positive. Community health workers and traditional medicine practitioners screened 123 PLWH; 54% were positive for mental health symptoms and 29% were positive for alcohol and substance abuse. Findings indicated that stepped-care was acceptable and feasible for all provider types.

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Globally, mental health disorders, including harmful alcohol and substance use, are the leading causes of years lost to disability, accounting for up to 189 million disability-adjusted life years annually. Depression accounts for up to 50% of disability-adjusted life years caused by mental health disorders, while alcohol and substance use accounts for up to 10% (Whiteford et al., 2013). It is estimated that people living with HIV (PLWH) are more than twice as likely to experience a mental health disorder.

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Mental health disorder estimates among PLWH range from 20% to 48% in developed countries and up to 72% in developing countries (Adewuya et al., 2007; Sittu et al., 2013).

In Zimbabwe, with an adult HIV prevalence rate of 14.7% (United Nations Children's Fund, 2013), mental health and HIV comorbidity rates are high. A recent study found that of 395 patients screening positive for a mental health problem, nearly 50% were also accessing services for an HIV-related issue (Chibanda et al., 2011). Alcohol and substance use is on the increase, which may indicate it being used as a coping mechanism to deal with stress surrounding an HIV diagnosis (Ministry of Health and Child Care Zimbabwe [MOHCC], 2012). High rates of alcohol use, depression, and anxiety in PLWH are known to influence self-care and risk-taking behaviors, exacerbating the risk of contracting other sexually transmitted infections (Brion et al., 2011; Joska, Kaliski, & Benatar, 2008; Sikkema et al., 2010). The evidence shows that PLWH who experience depression have numerous risks that impact their health. They are more likely to initiate antiretroviral therapy at lower CD4+ T cell counts and higher viral loads, have decreased adherence and retention, and delayed viral suppression leading to accelerated progression toward AIDS and AIDS-related mortality, compared to those PLWH who are not depressed (Atkinson et al., 2008; Lall, Lim, Khairuddin, & Kamarulzaman, 2015; World Health Organization [WHO], 2008). Specifically, one study found that PLWH who were depressed and had suboptimal adherence experienced a six-times greater mortality risk (Simoni et al., 2011).

Limited programmatic findings available in the literature have revealed promising results for mental health and HIV care integration in low-resource settings (Chibanda et al., 2011; Chibanda et al., 2015; Mpungu et al., 2015; Pence et al., 2014). However, a significant shortage of mental health professionals in many low-income settings contributes to a treatment gap of as much as 76% of people with mental health disorders who do not receive treatment (Adewuya et al., 2007). Research findings have indicated that among 58 low- and middle-income countries, 67% experience a shortage of psychiatrists, 95% experience a shortage of mental health nurses, and 79% experience a shortage of psychosocial workers (Bruckner et al., 2010). Findings in Zimbabwe are similar, as 50% of mental health professional positions are vacant and 90% of all psychiatric nurses work in one hospital in the capital city of Harare. As the majority of Zimbabweans visit traditional medicine practitioners prior to visiting a health facility (Pitorak, Duffy, & Sharer, 2012), they and other community-care cadres are potential resources to improve access to mental health services for PLWH (George, Chitindingu, & Gow, 2013; Van Ginneken et al., 2013).

The World Health Organization (2007) has provided guidance to address mental health service gaps in developing countries through the Optimal Mix of Mental Health Services Pyramid (Figure 1). In this model, the bulk of services that preserve and maintain the mental health of the populace are provided at the community level by strengthening the capacity of individuals, families, psychosocial service providers, and primary health care providers to address basic mental health needs. More costly specialized services are reserved for advanced mental health problems that are not alleviated by community levels of care (WHO, 2007). To decrease the mental health service gap and to effectively address mental health comorbidities in PLWH, innovative programs that effectively use multiple levels of community service providers—including nurses, community health workers, and

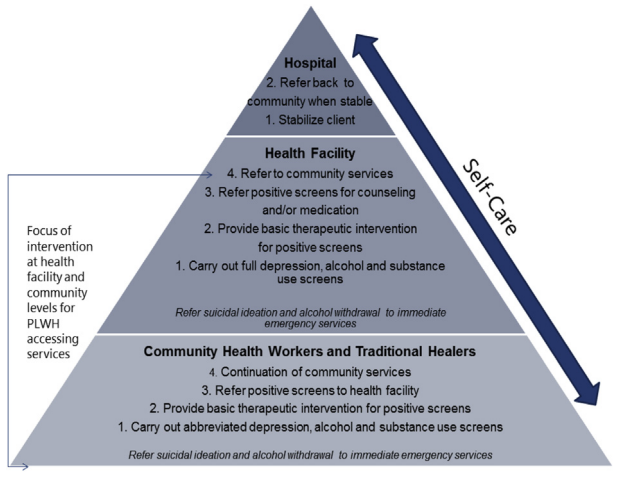

Figure 1. Integrated stepped-care model. (Adapted from World Health Organization, 2007.) PLWH = people living with HIV.

traditional medicine practitioners—should be considered to integrate mental health and HIV services.

Our paper describes a 1½-year pilot study with three distinct phases that examined the acceptability and feasibility of an integrated mental health and HIV stepped-care approach in nurses (facility-based), community health workers, and traditional medicine practitioners (community-based) in nine diverse urban and rural communities across Zimbabwe. The study was developed as part of the AIDS Support and Technical Assistance Resources (AIDSTAR-One) project that provided global leadership to increase the knowledge base for effective HIV programming. The study took place over 2 years, starting with an in-depth situational analysis, and two distinct program implementation phases. This triphasic approach is detailed in Table 1. The operational research aimed to bridge the gap between public health research and clinical practice. It provided evidence that integrating mental health stepped-care, consisting of three key and distinct steps (screening for common mental disorders, including alcohol and substance use; providing therapeutic interventions for positive screens; and referring for further mental health and psychosocial assistance) by nurses, community health workers, and traditional practitioners was acceptable and feasible, and could improve access to mental health services for PLWH.

Theoretical Model

Stepped-care uses evidence-based practice, keeps interventions low key, increases standards of self-management, increases the skills and confidence of practitioners, and optimizes a mix of skills that exist in resource-limited settings (Patel et al., 2008; Seekles, van Straten, Beekman, van Marwijk, & Cuijpers, 2011). The stepped-care model reflects the common factors theory. Common factors include (a) operating in a healing setting (traditional, community, or clinic based), (b) the provider and client having a shared belief in the change process, and (c) having a standard

Table 1. Study Design

	Training of Trainers	Intervention	Assessment	Duration
Phase 1: Qualitative Data Collection 2011		Systematic literature review, and 17 semi-structured interviews with mental health, HIV, and traditional medicine practitioners and policymakers		4 weeks
Phase 2: Pilot 2012	Training of Trainers: 16 providers from 5 urban and 4 rural clinics	Mental health and HIV integration at the site level with supportive supervision	Data Collection 1. Interviews with health facility, community, and traditional practitioners 2. Mental health screen results 3. Posttest surveys	Intervention = 20 weeks
Phase 3: Refined Program Model 2013	Training of Trainers: 21 providers from 4 urban and 1 rural clinic	Mental health and HIV integration at the site and community level with supportive supervision	Data Collection 1. Focus group discussions with health, community, and traditional practitioners 2. Mental health screen results 3. Referral logs	Intervention = 16 weeks

approach that outlines a clear protocol for services (Rotheram-Borus et al., 2009).

Methods

Our pilot study used a mixed-method exploratory sequential design that employed a phased descriptive approach with a longitudinal cohort during 2011–2013 in Zimbabwe. During all phases, the study team worked closely with the MOHCC and the Zimbabwe Association of Church Hospitals, a not-for-profit member-based organization that provided support to 126 hospitals and clinics with planning and coordination of medical service training programs. Qualitative feasibility and acceptability data were gathered via focus group discussions while quantitative data were gathered via project data collection records that recorded individual screening and referral results for each client receiving integrated services.

Population Sample Description

Our population of focus was an interdisciplinary group including nurses, community health workers, and traditional medicine practitioners. Nurses were facility based and provided HIV care and treatment services in the primary care setting. Community health workers were linked to health facilities and provided services to clients in community and home-based settings. Traditional medicine practitioners provided traditional healing services to clients in independent community locations. While traditional medicine practitioners generally did not coordinate services with the formal health care system, they were represented by a traditional medicine department within the MOHCC and were a common first point of contact for clients seeking health care services in Zimbabwe.

Study Design and Site Selection

A triphasic study design was used; data and lessons learned informed each subsequent phase of the pilot (see Table 1). Phase 1, development of the situational analysis, highlighted opportunities and barriers to integration, which has been reported (Pitorak et al., 2012). Findings from that qualitative research demonstrated existing momentum in stakeholders to address the mental health needs of PLWH; however, the majority of mental health services were nascent due to technical, financial, and human capacity constraints. Providing evidence of mental health and HIV practices to date, this qualitative research led to the development of the integrated stepped-care model detailed here.

During Phase 2, the initial pilot study, nine clinics were selected to participate under the guidance of the MOHCC, which selected five urban publicly funded pilot sites. The Zimbabwe Association of Church Hospitals selected four rural pilot sites. Clinic selection criteria included: (a) the clinic provided HIV care and treatment services to PLWH, (b) the clinic had some type of referral system that linked PLWH to community-based services provided by community health workers and/or traditional medicine practitioners, and (c) the clinic was committed to integrating mental health care into HIV care. The nine selected clinics were primary health facilities where PLWH routinely accessed HIV care and treatment services.

During Phase 3, the refined pilot study, five of the highest performing clinics (four urban and one rural) were again selected by the MOHCC and the Zimbabwe Association of Church Hospitals to participate in an expanded community-wide integration program. Selection criteria for the five clinics in Phase 3 included: (a) leadership capacity of trained nurses, (b) uptake of routine screening for mental health during Phase 2, (c) regular referrals for PLWH to community-based services during Phase 2, and (d) providers' demonstrated commitment to mental health and HIV integration during Phase 2. Each of the clinics selected three additional community health workers within their catchment areas to train and implement the program. Two additional traditional medicine practitioners were selected by the MOHCC, who were responsible for training 16 additional traditional medicine practitioners.

Training Method

During Phase 2, a convenience sample of 16 individuals (15 nurses and 1 traditional medicine practitioner) from the nine clinics participated in a 2-day

Training of Trainers. The study team developed a standardized training manual that detailed key information on mental health disorders including alcohol and substance use, the stepped-care mental health and HIV integrated approach, therapeutic communication, referral procedures, and data collection responsibilities. Training methods included lectures, discussions, and role-plays. The 16 individuals subsequently returned to their sites and trained 279 nurses, 140 community health workers, and 44 traditional medicine practitioners about the stepped-care approach in their clinics and catchment areas, thus extending the program reach into each community.

During Phase 3, five nurses from each of the five selected clinics that participated in the previous phase were invited to attend an updated Training of Trainers along with 15 nurse-selected community health workers in their catchment areas and two traditional medicine practitioners selected by the MOHCC. Building on lessons learned from the previous phases, Phase 3 Training of Trainer materials included expanded information on alcohol and substance use, more in-depth guidance on therapeutic counseling skills, a strengthened referral protocol and tools, and information to increase leadership skills to more effectively guide mental health and HIV integration at the participants' respective sites.

The Intervention

Employing the stepped-care model in Zimbabwe created therapeutic intervention availability at multiple entry points in communities to address the mental health needs of PLWH. Nurses, community health workers, and traditional medicine practitioners providing routine HIV services in clinic and community settings were trained to (a) screen for common mental disorders, including harmful alcohol and substance use; (b) provide basic counseling and therapeutic interventions for positive screens; (c) facilitate referrals to higher-level mental health services including medication, counseling therapy, and psychosocial services; and (d) create a protocol for mental health emergencies such as suicidal ideation and acute alcohol withdrawal. The stepped-care model that was adapted from the WHO Optimal Mix of Mental Health Services Pyramid is outlined in Figure 1.

Step 1: Mental health screening. All clients accessing HIV services with trained nurses, community health workers, and traditional medicine practitioners were screened for common mental disorders including harmful alcohol and substance use. Screening scales were selected based on cultural relevance, validity, reliability, and ease of integration into routine HIV services.

At the health facility level, nurses used the Zimbabwe-validated 14-question Shona Symptom Questionnaire (SSQ), which screens for common mental health disorders including depression and anxiety (Patel, Simunyu, Gwanzura, Lewis, & Mann, 1997). A score of 8 or greater on the scale indicated a positive mental health screen. The SSQ was available in English and in the local language of Shona, and the screen was conducted in the client's preferred language. Also, nurses at the health facility used the four-question CAGE-AID to screen for harmful alcohol and substance use. A score of 1 or greater indicated that harmful alcohol and/or substance use might be present. The CAGE-AID has been used globally, including in a number of other African settings (O'Brien, 2008). The CAGE-AID was translated into Shona, and then back-translated into English to ensure translation accuracy. This screen was also conducted in the client's preferred language.

At the community level, community health workers and traditional medicine practitioners used the Abbreviated Community Screen. This three-question screen, adapted from an FHI360 program in Vietnam, provided a simple screen for "feeling sad" (depression) and "worrying" (anxiety) using a Likert scale from 0 to 10 with faces representing a range from happy to sad and worried to calm. The last question screened for harmful alcohol and substance use. A response of 7 or greater to the *sad* or *worried* items or a positive response to the alcohol and substance use question indicated a positive screen and prompted a referral to the health facility for full SSQ and CAGE-AID screens by a trained nurse. The Abbreviated Community Screen was also translated into Shona and back-translated into English to ensure translation accuracy; these screens were also conducted in the client's preferred language.

Step 2: Therapeutic interventions. Clients screening positive for mental health disorders at the health facility or community level received a Wellness Recovery Action Plan. This intervention emphasized self-care. The provider and client co-created a mental health toolkit to draw on various tools (e.g., exercising, talking with friends/family, attending religious services) to promote client well-being and to identify actions to take when nearing a mental health crisis. The Wellness Recovery Action Plan has been employed in a wide variety of settings and is easily adapted based on individual client needs (Jonikas et al., 2011). Clients screening positive for alcohol and substance use at the health facility or community level received the Readiness to Change Rulers and motivational interviewing techniques to establish goal-setting related to reduction of harmful alcohol and drug use. These tools provided clear protocols and therapeutic counseling techniques to promote positive behavior change (Miller & Rose 2009).

Step 3: Referrals. A standardized referral protocol introduced at the beginning of Phase 3 aimed to improve bidirectional communication between nurses, community health workers, and traditional medicine practitioners participating in the study. The referral protocol was adapted from an existing WHO referral form specifically developed for integrated services (WHO, n.d.). The study team adapted the referral form to include scoring information for the SSQ, CAGE-AID, and Abbreviated Community Screen and also included space for providers to communicate about specific challenges and needed assistance. This bidirectional protocol increased patient involvement in their own care and also allowed for communication between different levels of service providers.

Data Collection

The nurses, community health workers, and traditional medical practitioners tracked recorded screens and referrals on an ongoing basis. During Phase 2, site-level screening and referral data were validated on a monthly basis. The study team also conducted post-test data and on-site interviews with nurses, community health workers, and traditional medicine practitioners to inform Phase 3 of the study.

During Phase 3, ongoing site-level screening and referral data were continually collected. Additionally, at the end of this phase, the study team held focus group discussions in English with 66 purposely sampled nurses, community health workers, and traditional medicine practitioners to collect detailed feasibility and acceptability data. Data were collected via six focus group discussions; two people took detailed notes at each discussion and compared their notes immediately after each focus group discussion. Furthermore, field notes that detailed the study process were kept in a research journal. Focus group discussions used a semi-structured interview guide that included open-ended questions guided by the literature and program experiences (Appendix). Questions explored providers' experiences integrating mental health services post-training, use of screening tools, the referral process, and changes observed. Probe questions were used to gain clarification. Common themes emerged and the results were combined to ascertain key insights and develop recommendations to improve mental health and HIV integrated service provision.

Results

Step 1: Mental Health Screening Results

Nurse-initiated facility-based screening. Screening uptake was high in both phases. During Phase 2, the nine clinics implemented the SSQ for 703 PLWH, with 159 (23%) positive screens, indicating the presence of depression and/or anxiety. During Phase 3, in the smaller sample of five clinics, a total of 312 Shona Symptom Questionnaire screenings were recorded, with 88 (28%) positive. Among those screening positive, a high number of individuals (n = 54, 61%) also reported suicidal ideation, which resulted in an immediate referral for emergency mental health treatment.

The reported number of alcohol and substance use screens was much lower than the number of mental health screens despite the fact that the stepped-care protocol called for integration of both screens during a single HIV care visit. Focus group discussions revealed that providers reported discomfort discussing this sensitive topic with clients and concern

that clients would feel judged or that they would fear being reported to authorities. During Phase 2, only 55 CAGE-AID screens were reported, with 20 (36%) positive screens, indicating the presence of harmful alcohol and/or substance use. During Phase 3, of the 59 CAGE-AID screens reported, 13 were positive (22%). All positive CAGE-AID screens also had high SSQ scores, reinforcing a correlation between harmful alcohol and/or substance use and poor mental health, demonstrating the need for further research in this area.

Community health worker and traditional medicine practitioner community-initiated screening. At community sites during Phase 2, 182 PLWH were screened using the Abbreviated Community Screen, with 58 (32%) screening positive to the *sad* or *worry* questions. During Phase 2, no scores were reported for the alcohol and substance use question. During Phase 3, a total of 123 Abbreviated Community Screens were reported; 66 PLWH (54%) screened positive to the *sad* or *worry* questions, and 35 (29%) of the PLWH screened positive on the alcohol and substance use question. See Table 2 for screening results.

Step 2: Therapeutic Interventions

While data were not collected on the number of clients who received therapeutic interventions for positive mental health and/or alcohol and substance use screens, focus group discussions gathered specific information on the acceptability of integrating therapeutic interventions during HIV services. Providers reported increased confidence using counseling interventions and stated that providing hope was their main counseling ability, helping clients understand, "There is life after an HIV diagnosis." Including trusted family members and friends in counseling was also found to be a useful strategy. This approach helped family members and friends better understand the mental health issues that their loved ones experienced, as reported in the focus groups. As a result of joint counseling sessions, family members and friends were better able to support PLWH. Providers also expressed that the client–provider relationship was improved and that they noticed an enhanced level of engagement in client care.

Step 3: Referrals

Nurse-initiated facility-based referrals. Notably, the numbers of bidirectional referrals increased between Phases 2 and 3, a result of the improved referral protocol and tools. CAGE-AID referrals increased from 45% to 85%, and SSQ referrals increased from 86% to 175%; in Phase 3, the number of referrals (154) far exceeded the number of positive screens (88). This increase (175%) likely indicated that providers were making referrals for clients even if they did not screen positive via the SSQ and CAGE-AID. This may be attributed to improved communication between providers and clients, as other needs, such as food insecurity and domestic violence, were identified even when clients did not meet the criteria for a positive mental health screen. Focus groups confirmed this to be a likely explanation. Referrals were most often made internally to nurses or other health care providers within a facility for further counseling. External referrals were most

Table 2. SSQ, CAGE-AID, ACS – Screening and Referral Results

	SSQ	**Number of Screenings**	**Positive > 8**	**Suicidal Ideation**	**Referral**
Health Facility Level	Phase 2	703	159 (23%)	-	136 (86%)
	Phase 3	312	88 (28%)	54 (61%)	154 (175%)
	CAGE-AID	**Number of Screenings**	**Positive > 1**	**Referral**	
Health Facility Level	Phase 2	55	20 (36%)	9 (45%)	
	Phase 3	59	13 (22%)	11 (85%)	
	ACS	**Number of Screenings**	**Positive - MH**	**Positive - Alcohol**	**Referral**
Community Level	Phase 2	182	58 (32%)	-	54 (93%)
	Phase 3	123	66 (54%)	35 (29%)	55 (83%)

Note: SSQ = Shona Symptom Questionnaire, MH = mental health, ACS = Abbreviated Community Screen.

often made to the National Psychiatric Hospital, Alcoholics Anonymous groups, religious leaders, and community support services.

Community health worker and traditional medicine practitioner community-initiated referrals. During Phase 2, of 58 positive mental health screens, 54 (93%) resulted in a referral to the health facility. During Phase 3, of 66 positive mental health screens, 55 (83%) resulted in a referral. It is unclear as to why there was a decrease in referrals at the community level between Phases 2 and 3. See Table 2 for referral results.

Discussion

Successes

The most important finding of this pilot study was the widespread feasibility and acceptability for the mental health and HIV integrated stepped-care approach noted by focus group discussion participants ($N = 66$). All providers saw the value of integrating mental health into routine HIV care and recommended that mental health screens should take place at each visit, similar to a blood pressure check. The stepped-care model of screening, therapeutic interventions, and referrals to higher levels of care when positive screens were identified, were clear and easy to follow. Participants also reported increased confidence to provide mental health screening, counseling, and referrals for PLWH.

Participants reported that the screening tools were easy to use and helped identify mental health problems that otherwise would not have been observed. Some reported that the 14-item SSQ was a challenge to integrate into practice because of its length and feeling overwhelmed with competing duties. As a result, some providers reported doing an informal "pre-screening" and chose to use screening tools only on clients who appeared *sad/worried* or who mentioned recent alcohol use and/or smelled of alcohol. Community health workers and traditional medicine practitioners reported that the Abbreviated Community Screen was easy to use in a low literacy population and allowed for stronger provider-client interactions and immediate referrals.

Nurses, community health workers, and traditional medicine practitioners all noted improved client-provider interactions and reduced negative attitudes and mental health stigma in health and community providers. It was reported that PLWH generally responded well to the screenings and stepped-care interventions. Focus group discussion participants reported greater ability to see beyond the physical needs of PLWH to incorporate a more holistic client-centered approach as a result of the program. Traditional medicine practitioners highly valued their involvement, as it allowed for a clear and recognized pathway to collaborate with the formal health system, further validating their roles with the MOHCC.

Challenges

Key limitations included the lack of available psychosocial services and the inability of the health system to respond to the clients' broader needs, which included food insecurity, the lack of financial security/employment, and domestic violence. Transportation was a significant barrier, most notably in cases where clients exhibited suicidal ideation. Linking with family members and friends of clients was found to be critical to ensure that PLWH received supportive follow-up care. The bidirectional referral system worked well, from community health workers and traditional medicine practitioners to health facilities. However, in some instances, hospitals disregarded referrals from traditional medicine practitioners, as they were not viewed as legitimate referral sources.

Nurses, community health workers, and traditional medicine practitioners related significant challenges to using the CAGE-AID screening tool. Provider discomfort in addressing the topic, as well as concern that clients might be offended or fear persecution, are significant challenges, and effective methods to overcome these obstacles should be further investigated.

Limitations

This study was exempt from ethical review, as individual client-level data were not collected. A retroactive internal Institutional Review Board conducted a review that confirmed the exemption. However, this limited the study team's ability to understand acceptability of mental health integration into HIV care by

PLWH. Additionally, the study did not collect client-level clinical data to determine if the intervention resulted in improved health outcomes. Site-level data collection may be incomplete, and detailed client demographic information was not collected. Data gathered through focus group discussions were subject to bias and limited to only the providers' perspectives; client perspectives might have differed from or bolstered findings.

Conclusions

Recommendations

Provision of mental health services for PLWH is critical to provide appropriate, long-term care and support, and to improve HIV-related morbidity and mortality. To address the mental health needs of adolescent and pediatric populations living with HIV, the stepped-care approach outlined in our study should be adapted and extended to sites serving these groups. Methods to reach specific sub-populations of PLWH who are at an increased risk for mental health disorders and harmful alcohol and substance use, including pregnant and postpartum women and other key populations, with integrated services should be identified. Effective means to increase provider skills to screen for and address harmful alcohol and substance use should also be identified. Given the high rates of suicidal ideation in clients screening positive for mental health disorders, further research should also be conducted to identify high-risk periods for PLWH to experience suicidality and effective interventions to use prior to those points in time. Future research should also examine how mental health and HIV integration impact adherence to treatment, retention in care, and clinical outcomes, including CD4+ T cell count, viral load, and HIV disease progression.

Implications

While results and recommendations presented in this study are specific to Zimbabwe, they indicate that integrating mental health and HIV services is feasible and acceptable to nurses, community health workers, and traditional medicine practitioners, and that integration can effectively expand availability of mental health services for PLWH. A standard operating procedure on the stepped-care approach for mental health and HIV integration that resulted from this pilot study has been shared with the MOHCC, which is seeking funding to scale-up the program nationwide.

Key Considerations

- In Zimbabwe, integrating mental health and HIV services is feasible and acceptable to nurses, community health workers, and traditional medicine practitioners, and integration can effectively expand availability of mental health services for people living with HIV (PLWH).
- Training and supportive supervision to implement the mental health and stepped-care approach increases the confidence of nurses, community health workers, and traditional medicine practitioners to provide screening, therapeutic interventions, and referrals for higher-level care. Training and supervision also improve client–provider interactions and decrease provider-associated mental health stigma.
- The lack of available psychosocial services and the inability of the health system to respond to clients' broader needs presents a key challenge to implementing a broader referral system that responds to psychosocial needs at the community level.
- Policies that support acceptance and training of traditional medicine practitioners and other nonspecialists to link to the formal health system will strengthen community-level services and may help increase the number of PLWH receiving critical mental health services.

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Disclosures

The authors report no real or perceived vested interests that relate to this article that could be construed as a conflict of interest.

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APPENDIX

Focus Group Discussion Guide

Objectives:

1. Learn about the Integration Leaders' experiences in implementing the cascade training and mental health screening and referrals.
2. Understand what worked well and what challenges were encountered implementing the pilot activity.
3. Discuss lessons learned that may contribute to a Standard Operating Procedure manual for scaling up mental health and HIV integration activities.

Introduction:

Hello. My name is _____. My coworkers and I are here on behalf of the AIDSTAR-One project, funded by the United States Agency for International Development, to conduct an assessment of the Mental Health and HIV Integration pilot program in Zimbabwean health facilities and community sites in _____ catchment area. We are working in collaborating with the Ministry of Health and Child Care.

We will be asking you questions about your experiences implementing the mental health screening and referrals as part of HIV care at this health facility and in your community sites. With this assessment, we aim to learn what worked well and what challenges you experienced during the pilot activity. The goal is to collect information that will help inform a standard operating produce manual for scaling up mental health and HIV integration activities in Zimbabwe.

The information you provide us is confidential and will not be shared with anyone else without your consent, including your supervisor.

This is not an evaluation of your performance. The information you provide is very important and valuable, as it will help the Government of Zimbabwe, the Ministry of Health and Child Care, and the health facilities involved in HIV care and support to improve service delivery around mental health care for people living with HIV. Your feedback will be incorporated with other catchment areas participating in this pilot in Zimbabwe. You may choose to stop at any time and you may refuse to answer any question.

Do you have any questions for me at this time? (Answer questions.)

Do I have your agreement to participate? (If yes, please proceed. If no, stop and note reason if offered).

Discussion Guide:

1. Please describe your experience integrating mental health services into HIV care following the training.
2. Please describe the training that was conducted at your community site or facility.
3. Did the training you received impact mental health services at your site or community?
   a. [Probe]: If so, how? Positively? Negatively?
   b. [Probe:] What changed?
4. Please describe your experiences using the mental health and substance use screening tools.
   a. [Probe]: Easy to use? Difficult?
   b. [Probe]: How have the tools affected mental health counseling/screening?
   c. [Probe]: How have the tools affected HIV services?
   d. [Probe]: Any challenges encountered using the screening tools?
5. Please describe the referral process/protocol used.
   a. [Probe]: Has your communication with referral organizations (and between the facility-level and community-level) changed?
   b. [Probe]: Were the referral registers and referral forms used? Helpful? Complicated?
   c. [Probe]: Where the referral "IN" and "OUT" forms used? Helpful? Complicated?
   d. [Probe]: Were job aids used? Which were most useful?
6. How was your experience with data collection?
   a. [Probe]: Was the data collection sheet for the health facility used? Helpful? Complicated?
   b. [Probe]: Was the data collection sheet at the community and traditional practitioner level used? Helpful? Complicated?

7. Have you observed any changes in attitudes or mental health stigma among health care workers, especially towards people living with HIV?
8. Please describe any challenges that you or your colleagues encountered during the pilot implementation?
   a. [Probe]: What was the biggest challenge? Were you able to resolve the challenges?
9. Thinking about your experience, what recommendations or consideration would you offer for replicating or scaling up mental health and HIV integration in another setting?
10. What do you consider the most important change you observed during the pilot?
    a. [Probe]: Among health care workers? Among the clients?
    b. [Probe]: Or other changes related to the pilot implementation?
11. Is there anything else that you would like to discuss?