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"Depression to me means…": Knowledge and attitudes towards depression among providers and ART patients in Malawi

Melissa A Stockton[1], Laura Ruegsegger[2], Kazione Kulisewa[3,4], Christopher Akiba[5], Mina C Hosseinipour[2,6], Bradley N Gaynes[7], Steven M Mphonda[2], Brian W Pence[1], Michael Udedi[3,4]

[1] Department of Epidemiology, University of North Carolina at Chapel Hill Gillings School of Global Public Health, Chapel Hill, USA
[2] University of North Carolina Project Malawi, Tidziwe Centre, Lilongwe, Malawi
[3] College of Medicine, Department of Mental Health, University of Malawi, Blantyre, Malawi
[4] Ministry of Health, NCDs and Mental Health Unit, P.O Box 30377, Capital City, Lilongwe 3, Malawi
[5] RTI International, Research Triangle Park, NC, USA
[6] Department of Infectious Disease, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, USA
[7] Department of Psychiatry, University of North Carolina at Chapel Hill School of Medicine, Chapel Hill, USA

Addressing the burden of depression among patients living with HIV requires an improved understanding of patients' and providers' views towards depression. In-depth interviews were conducted with providers (n=10), ART patients (n=11), clinic leadership (n=3), and a policymaker at two public facilities in Lilongwe, Malawi. Knowledge about the manifestations, causes, treatments, and effects of depression varied widely. Both patients and providers described depression as "thinking too much," a result of being unprepared or in denial. Depression and its clinical treatment were intricately intertwined with HIV. Participants described depression as resulting from HIV diagnoses, equated depression treatment with encouraging HIV status acceptance and ART adherence, and believed that depression would negatively affect HIV care engagement and outcomes. While antidepressants and depression counseling appear to be acceptable depression treatment options, social engagement, support and encouragement may also be important. There are important subtleties in how depression is understood and manifests in Malawi. Capacity-building programs for providers should highlight that depression is a disorder distinct from HIV, requiring its own medical management. Programs should also reinforce that ART adherence counseling may be insufficient to ameliorate depressive symptoms.

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Corresponding Author:
Melissa A Stockton,
Department of Epidemiology,
University of North Carolina
at Chapel Hill Gillings School
of Global Public Health,
Chapel Hill, USA
(email:
mastockt@email.unc.edu)

Introduction

Depression is highly prevalent among people living with HIV in Malawi and elsewhere in sub-Saharan Africa (SSA); prevalence estimates among populations living with HIV may be as high as 30 percent.[1–5] Depression itself is a major contributor to the burden of disease and disability throughout SSA[6,7] and a barrier to HIV care engagement and long-term viral suppression.[8–13] For example, common symptoms of depression such as loss of interest, hopelessness, poor concentration, and fatigue may diminish self-efficacy and motivation to engage in healthy behaviors including taking daily medication and attending HIV care visits.[14] There is limited mental health infrastructure and few mental health specialists in Malawi.[15] Recent trends in public health programming in low-resource settings have pushed to integrate mental health care into existing primary and community health services.[16–18] In SSA, task-shifting, a process of moving tasks to less specialized health workers as a means of improving health care coverage

and efficiency of available human resources, is seen as an effective, economical, and practical means of managing depression among people living with HIV.[16,19,20] There is an urgent need to understand the attitudes towards depression of patients living with HIV and their providers in order to ensure culturally relevant and acceptable depression management programs for people living with HIV in SSA.

While depression is a pervasive disorder that affects every country, ethnicity and culture, there are remarkable differences in both its prevalence and manifestation profile.[21] For example, a study comparing the presentation of depression between Tanzanians and Americans found that Tanzanians endorsed somatic and neurovegetative symptoms, while Americans described more mood-related symptoms.[22] Malawi is a high HIV prevalence setting where around ten percent of the adult population is living with HIV.[23] Given the high comorbidity of depression and HIV and the potential overlap in symptomology between HIV, ART side effects, and depression itself, there may be important nuances in how depression manifests and is understood.[24,25] However, limited formative research has been conducted in Malawi on depression and depression management among people living with HIV or HIV care providers.

The Malawi Ministry of Health (MOH) piloted a program – Strengthening Opportunities and Access to Resilience-Mental Health (SOAR-MH) – that integrated depression screening and treatment into ART initiation at two public, primary care clinics to address the burden of depression among people living with HIV.[15] Understanding providers' and patients' knowledge of and attitudes around the causes, manifestations, impact and management of depression in this specific Malawian setting is key to ensuring programs are appropriately designed and implemented to meet the mental health needs of the population. As such, this paper presents findings from a qualitative study nested within the screening-only phase of SOAR-MH.

Materials and Methods

Screening overview

SOAR-MH is a pilot program that integrated depression screening into ART initiation two clinics in Lilongwe, Malawi. Prior to program launch, HIV testing and counseling (HTC) counselors and providers were trained to screen patients for depression using the Patient Health Questionnaire-9 (PHQ-9) during ART. The PHQ-9 is a nine-item questionnaire that assesses the presence and frequency of the nine core symptoms of depression.[5,26–29] Providers managed patients with depression, those with PHQ-9 scores ≥ 5, using existing care pathways, namely, informal counseling, antidepressants prescription, or referral for psychiatric care. Additional details on the program and it's screening-only phase have been previously published.[15,30–32]

Study Sites

Data were collected in July and August 2017 from two semi-urban, primary health facilities in Lilongwe District.[33] These public facilities provide services free of charge and serve a mixed urban, semi-urban and rural population. The HIV clinics at both facilities offer HTC and ART services; in 2017, around 3,000 patients tested positive for HIV and initiated ART across these two sites. HTC is provided by counselors who have similar training to community health workers. ART services are provided by nurses and clinicians who rotate through every department at the facility. Most staff are government employees, though some are employees of private non-governmental organizations (NGOs). Staff turnover is high and the NGO staff change regularly. Matrons (head nurses) and in-charges (medical doctors) manage the facilities. Only one facility employs a psychiatric nurse who does not regularly offer psychiatric services, but acts as a general nurse.

Mental health clinics offered by private psychiatric specialists are irregularly held. Patients with severe psychiatric disorders can be referred to the psychiatric department at the district hospital.

Study Population and Sampling

The study included a convenience sample of HTC counselors, nurses, clinicians, leadership, and ART patients. The program coordinator or interviewer approached staff and leadership to schedule interviews. All patients who initiated ART after the launch of the program were eligible. The research assistants identified patients returning for ART services and invited these patients to participate. We aimed to interview both men and women, as attitudes towards mental health care may vary by gender[34–36] and patients both with and without depression at ART initiation. Interviews were conducted in Chichewa (the local language) or English based on participants' preferences at the facilities in a private location.

Data Collection Tools

The research team, including local experts in psychiatry, nursing and mental health policy, developed semi-structured interview guides. This guide first asked participants about their understanding of or experiences with depression and depression treatment. Participants were then asked about the depression screening program. Finally, the interviewer defined depression to participants as a "treatable mental illness," specifically detailing it's the nine core symptoms, and then asked participants about the acceptability of prescribing antidepressants or offering clinical counseling. As there is no exact translation for depression in Chichewa, we used "matenda a nkhawa" (literally, "disease of stress/worries/anxiety") and "matenda okhumudwa" (literally, "disease of sadness") in the interview guides after consultation with local experts.

Data Analysis

Interviews were carried out by a 28-year-old Malawian woman with a background in qualitative research and HIV care services who was blinded to the mental health status of the patient participants. The interviewer audio-recorded the transcripts and directly translated and transcribed the transcripts into English. The research team reviewed transcripts as they became available, and provided feedback to the interviewer throughout the data collection process. Two of the audio recordings and transcripts were checked for accuracy. NVivo 11 was used to analyze the data.

After reading each of the transcripts, the MS drafted a thematic codebook that captured emerging themes.[37,38] Many codes were developed a priori, such as codes for knowledge, attitudes, and acceptability of antidepressants and depression counseling.[38] Other codes were developed a posteriori, after examining the data. The coders (MS and LR) coded a subset of the same transcripts (4 of the 25) to ensure coding consistency. Coding was treated as an iterative process and the coders met several times throughout to discuss the addition, definition, and appropriate use of the codes that emerged from the data. Upon completion of coding, MS executed queries in NVivo and began reviewing all coded data related to knowledge and attitudes. Differences between patients and providers around depression causes, treatments, and attitudes emerged from these code comparisons and are discussed in the results section. The comparisons among groups became a key interest during this analysis and many of the results are presented around points of divergence in knowledge and attitudes around causes, manifestations, impact and management of depression.

Ethical Considerations

We sought and obtained approval from both the Malawi MOH's National Health Science Research Committee (NHSRC) institutional review board (IRB) (Protocol #1696) and the Biomedical IRB of the University of North Carolina at Chapel Hill (Study #16-2834). All participants provide signed informed consent. All study participants received the Malawian equivalent of 5USD (3,500 Malawian Kwacha) as a travel reimbursement.

Results

Participants included clinic staff (n=13), patients (n=11) and one policymaker. The majority of the staff participants were women, reflective of staff demographics. Of the patients, educational achievement was low and the majority were men and reported mild-to-severe depression at ART initiation (Table 1).

Causes of Depression

Both patients and providers explained how being unprepared for something unexpected, unable to accept current circumstances or denial could cause depression. An HTC counselor described her personal concept of depression in this way: "Depression to me means getting something unexpected. I think what brings about depression is mostly the lack of preparedness." In a similar manner, one nurse described how "people get depressed because they have failed to cope with the situations they find themselves in…Denial that the situation they are in has actually happened to them." In such examples, providers describe depression as a negative psychological reaction to adverse circumstances.

The most frequently cited cause of depression was an HIV diagnosis, a theme that was often embedded in all participants' discussions of other causes of depression. Patients and providers described how receiving an unexpected diagnosis, HIV stigma (or anticipated stigma), fear of death, or the incurability HIV or "the realization that 'I'll have this disease for life"' could cause depression. Both patients and providers raised marital issues as a potential cause of depression, but especially within the context of HIV, such as with discordant couples or extra-marital affairs resulting in HIV acquisition. Beyond HIV, most patients, and many providers in reference to patients' beliefs, brought up being "bewitched" and marijuana use as potential causes of depression. When asked why people become depressed, one patient responded; "Most people say it's because of weed... Others say the person's charms did not work so they have gone mad." While less prevalent, both patients and providers also raised employment, family issues, and health conditions as other potential causes of depression.

Manifestations of Depression

Most patients understood, at least abstractly, that depression is a mental illness. The policy maker noted that the specifics of depression are not well understood in the communities: "people just think it's a mental illness…so surely they don't know how to define or explain what depression is." Patients themselves demonstrated this level of understanding of depression as well as a connection with suicide risk; one patient "heard that depression is not a good illness because it puts a person's life at risk" and another noted "Depression? It is a big problem. It's an illness that can take a person's life," but did not provide more concrete details. Conversely, the providers, particularly the higher cadres of staff, provided descriptions in line with the DSM-4 defined clinical symptoms of depression.

Patients often used the phrase "kuganiza kwambiri" ("thinking too much" or overthinking) and "nkhawa" (stress, worries or anxiety) when discussing depression. While this concept of "thinking too much" was raised by providers, it

Table 1. Participant Characteristics

N or Mean(Range)	Clinic A	Clinic B	Total
Patients	**5**	**6**	**11**
Sex			
Female	2	3	5
Male	3	3	6
Age	36(24-57)	33(24-37)	34(24-57)
Education			
≤8 years	2	2	4
8-12 years	3	4	7
Depressed at ART initiation			
Yes	3	3	6
No	2	3	5
Marital Status			
Married	4	4	8
Single	1	-	1
Separated	0	2	2
Employment			
Employed	3	4	7
Self-employed	2	1	3
Unemployed	-	1	1
Clinic Staff	**7**	**6**	**13**
Position			
Nurse	2	2	4
Clinician	1	1	2
HTC Counselor	2	2	4
Matron	1	1	2
In-charge	1	-	1
Sex			
Female	6	4	10
Male	1	2	3
Age*	33(24-49)	36(27-50)	34(24-50)
Years at clinic	4(0-10)	6(0-15)	5(0-15)
Years of clinical experience	9(0-24)	9(2-20)	9(0-15)
Policy Maker	-	-	**1**

*Age was not asked of clinic leadership

was more evident among the patients' descriptions of depression causes. A male patient who had depression at ART initiation gave a personal example of this phenomenon. "I was overthinking because I kept on getting sick. That's when I began to think that I might be HIV positive….and if I am, what will my future be like? So every time I was among my friends such thoughts would come. Anxiety would set in." While rooted in his suspicion that he may have HIV, this demonstrates the words and phrases used to describe the experience of depression.

Impact of Depression

While patients at least abstractly appreciated that depression would negatively, and at times even fatally, impact health and wellbeing, providers

and clinic leadership were much more conversant with its adverse effects. In particular, providers described how individuals with depression would stop caring for themselves, be less likely to engage in treatment, have worse health outcomes. One provider stated, "Depression affects the health of patients, some people can lose their appetite and so their bodies would not be healthy…in such cases a person can get weak." Patients and providers alike noted how depression could cause someone to experience physical illnesses. One patient described how "some [individuals with depression] fall. They faint …., can lose weight even though they are not sick because of overthinking."

Providers believed depression hinders health care seeking and engagement, particularly for people living with HIV. One nurse described how patients living with HIV become apathetic towards seeking HIV treatment or coming to their appointments: "it is difficult for a depressed person to come to the clinic because they think that it doesn't matter whether they have medicine or not so they don't bother." In this manner, depression decreases patients' motivation to seek or engage in care. Providers also described how depression could worsen adherence, treatment effectiveness, and health outcomes. However, as heard from one nurse, examples were not limited to HIV: "Let's also say a person is depressed and diabetic at the same time or has high blood pressure, they may not take their meds in the correct way and can die early." Several providers believed that simply being depressed would directly decrease the effectiveness of medication. However, only one patient made this connection, stating "when someone is depressed, their body is also affected. Such a person has so many things going through their mind and as a result of that, treatment becomes ineffective." Such examples demonstrate how providers, and at least one patient, connect psychological disorders with physical health.

Management of Depression

Both patients and providers described how depressed individuals could be helped through encouragement, talking or spending time with others, and involvement with church. One patient described her experience managing her depression without clinical intervention: "I have not been given any help myself but what I think helps me is associating with other people and not dwelling much on harmful thoughts." While patients often were unaware of how depression could be treated clinically, they appeared to believe engaging with the individual would help them overcome their "problem" and stop being depressed. One depressed patient even described how the provider instructed him to "be associating with other people so as not to over-think things. I was also told to find activities I can participate in to keep me busy." This further suggests a role for social engagement and support in helping people with depression, both as a means to help address the causes and ameliorate the symptoms of depression. Counseling was the most common clinical treatment option for depression brought up by providers, though providers did not specify a particular evidence-based psychotherapy. When providers gave examples of how they provide depression counseling to patients, it was frequently described as incorporated into HTC or ART adherence counseling.

> *"At ART, when we notice that a patient is depressed, we take them aside and tell them that anyone can get infected with HIV. What they need to do is to accept the situation because it is not the end of their life…. We mix [counseling for HIV and depression]. We don't just talk about the depression. We are supposed to discuss with them the cause of their depression. The depression comes about mostly because the patients are in denial."*
>
> ***Nurse***

This quote demonstrates how providers counsel patients on accepting their status and ART adherence as a means of addressing their depression. Some HTC counselors detailed the HTC process as a means of addressing depression and were unaware of what providers could further do for these patients. This may in part be a reflection of how providers frequently see or think about depression as caused by HIV. A similar example played out when a patient stopped an HTC counselor in the clinic to complain of depressive symptoms. The counselor responded: "I told him that I would help him, but the first thing we can do to find out the cause of depression was to get him tested." This highlights how providers conceptualize depression treatment as intertwined with HIV treatment. Other providers also described how depression counseling should focus on identifying and addressing the causes of depression, but ultimately revealed the inherent assumption that the cause would be HIV-related.

The higher cadres of staff were the most familiar with pharmacological treatment options for more serious cases of depression, often describing how antidepressants or anti-psychotics could be prescribed. One nurse acknowledged that clinical counseling may be insufficient and augmented with antidepressants: "There are other times when counseling alone would not help and so they would need some medication." While providers knew that medication is available, they had limited experience prescribing medication for depression and were more comfortable referring cases for specialized care. However, once depression medication was introduced to HTC counselors and patients during the interviews, they responded positively to the concept, with some concerns about side effects and taking too many medications at once. For example, one patient hypothetically describes how he would feel about taking medication: "I would not know the side effects of the drugs, how they would affect my brain…it would be okay for some but not for others depending on the information they get." While suggesting potential acceptability, this feedback also demonstrates the importance of clearly explaining the purpose of antidepressants and their potential side effects.

Discussion

In this qualitative study, patients had a limited understanding of depression. Depression was described as resulting from being unprepared, experiencing something unexpected, disappointment or denial, and was often considered intricately intertwined with HIV. Depression appeared to manifest as "thinking too much" or having "worries, stress or anxiety," though providers were aware of the classical symptoms of depression. While patients more abstractly understood that depression would adversely impact health, providers were keenly aware of how depression can undermine health care engagement and outcomes. Finally, patients' knowledge of clinical depression treatment was limited, and providers were most familiar with counseling. However, the interviews suggest clinical counseling and antidepressants could be acceptable treatment options.

While acknowledging that depression is a mental illness, widespread attitudes suggest providers and patients alike view depression as a transient negative reaction – with the potential of life-threatening outcomes such as suicide – to adverse circumstances, rather than a clinical disorder. In terms of etiology, all participants often attributed depression to psychological and social factors, with limited understanding about its biological determinants. Other qualitative research conducted in the region has also found that depression is not always formally recognized as a disease.[39] This suggests a need for more comprehensive mental health education that expounds upon the difference between distress and a mental disorder. This will be particularly relevant for providers who may become responsible for psychiatric care through the introduction of task-shifting care models.

Depression was understood as being caused by experiencing something unexpected and was often described as "thinking too much." Other studies in SSA have also documented similar manifestations of depression and use of this idiom.[11,40–43] Understanding the local expressions used to describe depression and express psychological distress can facilitate providers' ability to connect with patients and successfully provide counseling.[11] The subtle differences in how depression is described and experienced in Malawi highlight the need for tailored treatment programs to incorporate the local lexicon.

While antidepressant management and depression counseling may be acceptable clinical treatment options, patients raised some concerns. Patients wanted providers to explain the medications' purpose and side effects. Social engagement and support were also important aspects of helping patients with depression. Other regional studies found that patients wanted depression treatment options beyond medication, that would empower patients emotionally and socially.[44,45] Depression interventions should consider the role of social engagement and support outside of the clinic setting.

Depression and its clinical treatment were intricately intertwined with HIV, potentially as result of including patients living with HIV and their providers. Participants described depression as resulting from HIV diagnoses, equated depression treatment with encouraging HIV status acceptance and ART adherence, and believed that depression would negatively affect HIV care engagement and outcomes. In other studies, patients linked depression to HIV and found that HIV stigma and marital challenges among sero-discordant couples caused psychological distress.[11,44] It is possible that HIV featured so prominently in these interviews because providers are taught that patients often become depressed following an HIV diagnosis or because of participants' involvement with the SOAR-MH program. Regardless, depression treatment programming will need to explain that depression is a disorder distinct from HIV and reinforce that ART adherence and status acceptance counseling may fail to ameliorate depressive symptoms.

The COVID-19 pandemic has had an adverse impact on mental health in Malawi, particularly with respect to suicide risk and anxiety and depressive symptoms among adolescents.[46,47] In some cases, the pandemic also influenced the delivery depression services, through an increase of telephone-delivered counseling and suicide-risk monitoring.[48] In response to concerns over the psychological toll of the pandemic, there has been an increase in mental health awareness campaigns in Malawi,[46] which may improve mental health literacy and access to services. As such, understanding attitudes towards depression and its treatment will be increasingly relevant as mental health care continues to expand and shift in a post COVID-19 Malawi.

Limitations

This qualitative study included a small, convenience sample of staff and ART patients from two public facilities. As such, the study findings may not be generalizable to the general Malawian population. Further, as this qualitative study was part of an evaluation of an ongoing screening program where participants worked or received care, it is possible that participants' responses were subject to social desirability bias. Additionally, while efforts were made to ensure the appropriate local words were used to refer to depression as an illness, it is possible that the lack of medical terms in the local language and low mental health literacy may have hampered the specificity of these discussions. Nevertheless, this is one of the first qualitative studies on depression conducted in Malawi that elicited insights from a variety of key groups.

Conclusion

There are important subtleties in how depression is understood and manifests in Malawian populations living and working with HIV. As we continue to build capacity among providers to manage depression, such efforts should: incorporate the local manifestations and lexicon; highlight that depression is a disorder with biological, psychological and social determinants distinct from HIV, requiring its own medical management; reinforce that HTC and ART adherence counseling may fail to ameliorate depressive symptoms; and strive to increase patient understanding of depression and its clinical treatment.

Appendix

Appendix 1: Semi-Structured Guide for Providers, Patients, and Leadership

PROVIDER QUESTIONS:
General understanding of depression and depression treatment

1. Have you heard of "depression?" What does this term mean to you?
    (a) What do you think causes depression? Why do you think some people are depressed?
    (b) How would you know if a person were depressed? What are some of the symptoms of depression?
    (c) What do you do if someone is depressed?
    (d) What do you think can be done to help someone with depression? Do you know any treatment available?
        i. What medications are you aware of? What treatments do you have experiencing providing?
    (e) What do you think about when someone has depression? How do people in general think about depression? What beliefs about depression are you aware of?
2. Have you had any training in psychiatric care? If so, can you please describe?
3. Depression is a treatable mental illness. An individual with depression may have some or all of the following symptoms: felt sad or down; lost interest in things that used to give them pleasure; difficulty concentrating; have low energy; decrease/increased appetite or unintentional weight gain/low; trouble sleeping/insomnia or sleeping too much; have feelings of guilt or worthlessness; been moving or speaking more slowly than normal; and/or thoughts of being better off dead or of physically harming oneself most of the time for at least two weeks.
    (a) How often do you see patients with these types of symptoms? Can you tell me about what happens when/if you notice patients with these symptoms?
        i. Where do you see patients with depression? Could you describe an example of when you saw a patient with these symptoms? What happened?
    (b) How often do you see patients who express thoughts of being better off dead or of physically harming oneself? Can you tell me about what happens when/if you notice patients with these symptoms?
        i. Where do you see patients with these symptoms? Could you describe an example of when you saw a patient with these symptoms? What happened?
    (c) How do you think depression affects patients' health? Access to healthcare?

i. Probe on HIV – What about for patients living with HIV?

Evaluation of Screening Program (Phase I) Implementation

A depression screening program has recently been implemented in this health facility as part of a Ministry of Health screening initiative called SOAR Mental Health. Can you tell me about your experience with the screening initiative? What do you know about SOAR Mental Health?

Possible Probes:

1. Can you tell me about when you first learned about the SOAR mental health screening initiative?
   (a) How did you feel about implementing the SOAR mental health screening program? What about your colleagues? How did they feel about implementing this program?
2. Can you tell about any training you received as part of SOAR mental Health?
   (a) *If they attended a training*
      i. What do you remember about the sensitization meeting or training(s)?
      ii. What was discussed during the training(s)? What did you learn?
      iii. Were there topics you wanted to learn more about?
      iv. How did you find the training?
      v. Were there any aspects of the training you did/didn't like? Please explain?
   (b) *If they were trained on the job:*
      i. How were you trained on the jobs?
   (c) Do you think the training prepared you to implement the screening program?
   (d) *If they say not,* continue on to screening questions, probe on how they learned to use PHQ-2/PHQ-9.
3. Can you tell me about how patients are screened for depression at area ## as part of HTC or ART initiation? Are any particular methods or questions used to screen for depression?
   (a) What do you know about the PHQ-9?
   (b) How do you use the PHQ-2/PHQ-9?
   Depending on cadre of staff
      i. What do you think patients think about the screening (or PHQ-2/PHQ-9)?
      ii. Do you think patients understand the PHQ-2/PHQ-9? In your experience, have any of the questions included in the PHQ-2/PHQ-9 confused patients?
      iii. *PHQ-2:*
         A. How do patients respond to the question "During the past two weeks, how often have you been bothered by feeling down, depressed or hopeless?" Do they understand the question? Can you provide an example of how a patient has responded?
         B. How do patients respond to the question "During the past two weeks, how often have you been bothered by little interest or peasure in doing things?" Do they understand the question? Can you provide an example of how a patient has responded?
         C. How do you differentiate between "not at all, several days, more than half the days, nearly everyday"? Are these categories clear?
      iv. Can you tell me about the first few times you used the PHQ-2/PHQ-9? How did you feel?

Have your feelings about the PHQ-2/PHQ-9 changed since the start of the program?

v. *For nurses or clinicians:* Who do you think should be responsible for administering the PHQ-9?

A. How comfortable are you with clerks or counselors administering the PHQ-9? Please explain.

(c) Can you describe what happens if a patient screens positive for depression during HTC/ART initiation at this clinic? What do(would) you normally do?

i. Have you ever provided counseling? How did you decide this was the best treatment? Can you give some examples of when you have provided counseling? What did you cover?

ii. Have you ever proscribed medication? How did you decide this was the best treatment? Can you give some examples of when you proscribed medication?

(d) Can you describe what happens if a patient screens positive for suicidality during HTC/ART initiation at this clinic? What do(would) you normally do?

i. How do you assess you suicide risk?

A. How do you categorize suicide risk?

B. *If suicide risk assessment tool is mentioned:* Do you think patients understand the suicide risk assessment questions? In your experience, have any of the risk assessment questions confused patients?

ii. How comfortable are you managing thoughts of self-harm?

A. What do you do if you are worried a patient will actually hurt themselves? Where can you send such patients for help?

B. *If suicide risk assessment tool is mentioned*: What do you do if a patient has a low or active-low suicide risk? What do you do if a patient has active-moderate to high or active-acute suicide risk?

(e) Do you have enough time to screen patients for depression and provide appropriate treatment or referral?

i. How many patients are you screening a day? About how much time do you think the screening has added to ART initiation care?

(f) If you have any questions or concerns about the screening, who can you ask or reach out to?

i. Since the program started, did you ever need help administering the PHQ-9?

(g) Can you describe any challenges you have faced screening for depression?

i. What about your colleagues? Have you heard anything about challenges they may have faced?

4. How do you feel about implementing this screening program?

(a) How do your colleagues feel about implementing this program?

(b) How do you think your managers feel about implementing this program?

(c) Can you tell me about how this program is being supervised? How do you feel about the supervision of this program?

(d) Do you have any suggestions for how this screening program could be improved?

Preparation for Depression Treatment

1. There are certain medications available in Malawi that can be used to treat depression. We are trying to see if we can offer these medications to individuals struggling with these problems. What would be some of the difficulties patients might face if they had to take a medication once or twice day to treat these problems?
   (a) What could make taking a medication to treat these symptoms easier?
2. We are trying to see if we can give counselling to some people who are struggling with these problems. What would be some of the difficulties patients would face if they had to come for counselling once a week, for a month?
   (a) What could make it easier to come?
3. If someone wanted to talk about some of the problems they had been facing, what would be the best setting?
4. Finally, do you have any other concerns or suggestions you would like to share with us.

PATIENT QUESTIONS:
Patient satisfaction with depression screening

1. I'd like you to think back to the day you tested positive for HIV. Can you tell me about when you decided to get tested?
   (a) Why did you decide to get tested? Can you tell me about what happened while you were at the health care facility? *General Probes:*
      i. How did you feel?
      ii. How do you feel you were treated?
      iii. Were there things you liked/disliked about the care you received?
   (b) *Possible Probes for HTC Counseling/Being Screened with the PHQ-2:*
      i. What happened when you met with the HTC counselor?
         A. What was covered during the HTC session? Did the counselor ask you any questions?
         B. What happened after receiving your test results?
         C. Did you receive any post-test counseling? Can you tell me about what happened during the counseling session? Did the counselor ask you any questions?
         D. Did you have any concerns or questions? Were you able to ask these questions to the counselor?
   (c) If PHQ-2 question are not mentioned, do you remember being asked about how you had been feeling over the previous two weeks? What do you remember? What did you say? *Possible Probes for Consent Process:*
      i. Can you tell me about what happened when you were approached about participating in a research study?
         A. Can you describe to me what the researchers are studying?
         B. Where did consenting take place?
         C. How did you feel about being approached to participate in the study?
         D. Did you have any questions for researchers? Did you ask the researchers any questions?
   (d) *Possible Probes for Seeing Clinician/Being Screened with the PHQ-9:*

i. Did you see a clinician or multiple clinicians?
   A. *If YES*: What did you and clinician talk about? What do you remember being asked by the clinician? What did you respond?
   B. How do you feel you were treated by the clinician?
   C. Did you have any concerns or questions? Were you able to ask these questions to the clinician?
   D. *If NO*: Who did you see? Can you tell me about how you received your HIV medication?

General understanding of depression and depression treatment

Now, I would like to ask you some questions about depression.

1. Have you heard of "depression?" What does this term mean to you?
   (a) How would you know if a person were depressed?
   (b) What do you think causes depression? Why do you think some people are depressed?
   (c) What do you think about when someone has depression? Do you know any treatment available?
2. *Depression is a treatable mental illness. An individual with depression may have some or all of the following symptoms: felt sad or down; lost interest in in things that used to give them pleasure; difficulty concentrating; have low energy; lost their appetite; have feelings of guilt or worthlessness; been moving or speaking more slowly than normal; and/or thoughts of being better off dead or of physically harming oneself most of the time for at least two weeks*. There are certain medications that can be used to treat these symptoms. We are trying to see if we can offer these medications to individuals struggling with these problems. What would be some of the difficulties you would face if you had to take a medication once or twice day to treat these problems?
   (a) What could make taking a medication to treat these symptoms easier?
3. We are trying to see if we can give counselling to some people who are struggling with these problems. What would be some of the difficulties you would face if you had to come for counselling once a week, for a month?
   (a) What could make it easier to come?
4. If someone wanted to talk about some of the problems they had been facing, what would be the best setting?

Understanding of the PHQ-9:

Administer the PHQ-9.

I am now going to ask you about the series of questions you were just asked:

During the past two weeks, how often have you been bothered by each of the following symptoms?

1. Feeling down, depressed, or hopeless (closed spirits)
   (a) What does this question mean to you?
   (b) Can you give some examples of how you would know if a person felt this way? If you felt this way?
2. Little interest or pleasure in doing things (not having courage or anxiety, spirits are low)
   (a) What does this question mean to you?
      i. Can you give an example of someone who:
         A. Doesn't have courage
         B. Has anxiety
         C. Has low spirits

(b) Can you give some examples of what things you think a depressed person might not do? Can you give some examples of things you might not do?

3. Trouble falling or staying asleep (insomnia, sleeplessness), or sleeping too much

   (a) What does this question mean to you?
   (b) Can you give some examples of what sleeplessness or insomnia look like? Can you give an example of sleeping too much?

4. Feeling tired or having little energy

   (a) What does this question mean to you?
   (b) Can you give some examples of what happens when a person is so fatigued?

5. Poor appetite or overeating

   (a) What does this question mean to you?
   (b) How would you know if you or someonelse was over/under eating?

6. Feeling bad about yourself – or that you are a failure or have let yourself or your family down (feeling ashamed or disgraced)

   (a) What does this question mean to you?
   (b) Can you give some examples of how you would know if a person felt this way? If you felt this way?

7. Trouble concentrating on things:

   (a) What does this question mean to you?
   (b) Can you give some examples of what happens when someone can't concentrate?
   (c) Can you give some examples of how you would know if a person was acting this way this way? If you were acting this way this way?

8. Moving or speaking so slowly that other people could have noticed? Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual (being a disturbance or not at peace)?

   (a) What does this question mean to you?
   (b) Can you give some examples of how you would know if a person was acting this way? If you were acting this way?

9. Thoughts that you would be better off dead or of hurting yourself in some way? *(feelings of suicide or lost hope)***

   (a) What does this question mean to you?
   (b) Can you give some examples of how you would know if a person felt this way? If you felt this way?

LEADERSHIP QUESTIONS:

General understanding of position

1. How long have you worked at the clinic?
2. How long have you been a nurse?
3. Can you tell me about your responsibilities as matron/in-charge?
4. Do you see patients/work in the ART clinic?

General understanding of depression and depression treatment

1. Have you heard of "depression?" What does this term mean to you?

   (a) What do you think causes depression? Why do you think some people are depressed?
   (b) How would you know if a person were depressed? What are some of the symptoms of depression?
   (c) What do you do if someone is depressed?
   (d) What do you think can be done to help someone with depression? Do you know any treatment available?

      i. What medications are you aware of? What treatments do you have experiencing providing?

2. Can you tell me about the burden of mental health issues in Malawi? At this clinic?

(a) Specifically for Depression and depression among PLHIV?
(b) How do you think depression affects patients' health? Access to healthcare?
    i. Probe on HIV – What about for patients living with HIV?

3. What are some of the challenges for diagnosis and managing depression in Malawi?
    (a) Are there any challenges specific to healthcare sector?
4. How often do you see patients with these types of symptoms at this clinic? Can you tell me about what happens when/if you notice patients with these symptoms?
    (a) Where do you see patients with depression? Could you describe an example of when you saw a patient with these symptoms? What happened?
5. How often do you see patients who express thoughts of being better off dead or of physically harming oneself? Can you tell me about what happens when/if you notice patients with these symptoms?
    (a) Where do you see patients with these symptoms? Could you describe an example of when you saw a patient with these symptoms? What happened?
6. What do you think about when someone has depression? In general, do you think people are aware of "depression?"
    (a) How do people in general describe depression? What do they think causes depression?
    (b) How do you think people with depression are treated in society?
        i. How do you think people who are suicidal or have tried to kill themselves are treated in society?
        ii. How do you think people who are known to self-harm are treated?

Evaluation of Screening Program (Phase I) Implementation

A depression screening program, called SOAR Mental Health, has recently been implemented in this health facility as part of a Ministry of Health screening initiative. Can you tell me what you know about this program and about your experience with the screening initiative?

Possible Probes:

1. Can you tell me about when you first learned about the screening initiative?
    (a) How did you feel about implementing this program? What about your colleagues? How did they feel about implementing this program?
    (b) Did you attend the sensitization meeting in January? What do you remember about this meeting?
2. Can you tell about the training you received?
    (a) What happened during the training?
    (b) What was discussed during the training? What did you learn?
        i. Were there topics you wanted to learn more about?
    (c) How did you find the training?
    (d) Were there any aspects of the training you did/didn't like? Please explain?
3. Can you tell me about how patients are screened for depression?
    (a) How do you use the PHQ-9?
        i. What do you about the PHQ-9?
        ii. What do you think patients think about the PHQ-9?
        iii. Do you think patients understand the PHQ-9? In your experience, have any of the questions included in the PHQ-9 confused patients?

4. Can you describe what happens if a patient screens positive for depression? What do(would) you normally do? What normally happens?
    (a) Have you ever provided counseling? How did you decide this was the best treatment? Can you give some examples of when you have provided counseling? What did you cover?
    (b) Have you ever proscribed medication? How did you decide this was the best treatment? Can you give some examples of when you proscribed medication?
5. Can you describe what happens if a patient screens positive for suicidality? What is normally done?
    (a) How do you assess you suicide risk?
        i. How do you categorize suicide risk?
        ii. *If suicide risk assessment tool is mentioned:* Do you think patients understand the suicide risk assessment questions? In your experience, have any of the risk assessment questions confused patients?
    (b) How comfortable is your staff managing thoughts of self-harm?
        i. What do you do if a patient has a low or active-low suicide risk?
        ii. What do you do if a patient has active-moderate to high or active-acute suicide risk?
        iii. What do you do if you are worried a patient will actually hurt themselves? Where can you send such patients for help?
6. How has the depression screening affected routine patient flow?
7. Does your staff have enough time to screen patients for depression and provide appropriate treatment or referral?
    (a) About how much time do you think the screening has added to ART initiation care?
8. If you have any questions or concerns about the mental health program, who can you ask or reach out to?
9. Can you describe any challenges this facility has faced implementing this program.
    (a) What about your staff? Have you heard anything about challenges they may have faced?
10. How do you feel about implementing this screening program?
    (a) How does your staff feel about implementing this program?
    (b) Can you tell me about how you are supporting your staff to implement this program?
    (c) Do you have any suggestions for how this screening program could be improved?

We've had some challenges around the following. Do you have any recommendations for how these issues can be addressed.

1. Ensuring that patients who screen positive on the PHQ-2 are actually screened with full PHQ-9
2. Ensuring that patients who are depressed are reassessed when they return for care
3. Ownership that this is part of clinical care

Preparation for Depression Treatment

1. There are certain medications available in Malawi that can be used to treat depression. We are trying to see if we can offer these medications to individuals struggling with these problems. What would be some of the difficulties patients might face if they had to take a medication once or twice day to treat these problems?
    (a) What could make taking a medication to treat these symptoms easier?

2. We are trying to see if we can give counselling to some people who are struggling with these problems. What would be some of the difficulties patients would face if they had to come for counselling once a week, for a month?
   (a) What could make it easier to come?
3. If someone wanted to talk about some of the problems they had been facing, what would be the best setting?

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