Post-conflict mental health in South Sudan: overview of common psychiatric disorders

Part 1: Depression and post-traumatic stress disorder

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Introduction

Mental health is "a state of well-being in which every individual realizes his or her own potential, can work productively and fruitfully, and is able to contribute to her or his community."(1) Mental illness often attracts a lower priority than physical illness in post-conflict and low and middle-income societies but the two are inextricably linked. Untreated and unrecognized mental illness adds substantially to poor health. Neuropsychiatric conditions, such as depression and substance abuse, account for 9.8% of total disease in low and middle income countries, with depression the leading cause of years lived with disability (2). While probably greatly underestimated, more than 800,000 people annually commit suicide with the majority (86%) coming from low and middle-income countries (3). Additionally, untreated mental disorders are associated with heart disease, stroke, injury, and impaired growth and development in children (3). Mental illness has a profound and often underestimated impact on the health and functioning of individuals and communities across post-conflict societies.

Mental health is particularly important for South Sudan as the majority of the population has been exposed to high rates of violence, displacement, and political and social insecurity. Mental health data from South Sudan is limited. One post-conflict study from Juba found that 36% of the sampled population (n=1,242) met criteria for post-traumatic stress disorder (PTSD) and 50% for depression (4). Another study, conducted in northern Uganda and South Sudan, found the prevalence of PTSD was 46% among South Sudanese refugees and 48% among South Sudanese who stayed in the country (5). These studies indicate a high prevalence of mental illness in South Sudan as well as the potential for an increase in psychiatric disease as more refugees and internally displaced persons return home. As South Sudan attempts to reconcile recent memories of war with optimism for the future, we must pay close attention to its citizens' mental health.

Health care providers in South Sudan must become aware of the high prevalence of mental illness, its associated stigma, and know how to screen, diagnose and treat common mental disorders. Part I of this two-part series provides an overview of the common psychiatric conditions seen in post-conflict societies and general medical settings with a focus on depression and PTSD. Part II will focus on anxiety and substance (including alcohol) abuse. Brief explanations, screening questions to assess risk, signs and symptoms, and treatment suggestions are provided for each condition.

Depression

Depression is a common condition world-wide and particularly in post-conflict settings. Studies from post-conflict South Sudan found rates of depression as high as 50% (4). Untreated depression often results in neglect of personal and professional responsibilities and significantly impacts daily life. It also negatively affects the lives of families. Severe depression may lead to suicide. A study of South Sudanese ex-combatants found that 15% reported wishing they were dead, or had thoughts of self harm (6). The main symptoms of depression include low mood (sadness) or loss of interest in usually enjoyed activities (anhedonia) every day, most of the day for at least two weeks plus four additional symptoms listed in table 1.

Screening: The following questions help to assess for depression (see table 2). The first two are adapted from the Patient Health Questionnaire (PHQ-2) screening tool, which is used to assess frequency of depressed mood and low interest in the past month. Each question is scored as 0 (NO feelings of sadness or hopelessness or continued interest in enjoyable activities in the past month) or 3 (feelings of sadness or hopelessness or disinterest in enjoyable activities nearly every day for the past month). A total score of greater than or equal to 3 is 83% sensitive and 92% specific for detecting depression (8). Risk of suicide is a serious concern so one should always ask if someone has thoughts of killing him or herself when screening for depression.

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Table 1. Diagnostic criteria for depression

Symptoms	• Sad or low mood OR • Loss of interest in usually enjoyed activities + 4 or more of the symptoms included below: • Feelings of guilt (feeling worthless/ hopeless) • Decreased energy • Motor slowing or agitation • Poor concentration • Disturbed sleep (too much or too little sleep) • Excessively increased/decreased appetite • Thoughts of harming/killing oneself or actions that result in death or harm to oneself
Severe depressive episode with psychotic symptoms	Severe symptoms of depression include: • Psychosis (loss of contact with reality): a. Hallucinations (seeing or hearing things other people do not see or hear) b. Delusions (beliefs that are firmly held despite being contradicted by what is generally accepted as reality • Activity level so low that daily functioning is impossible (Severely sad mood that results in lack of desire to eat or drink or tend to personal hygiene) • Suicide

Table 2. Screening questions for depression

Depression Risk	1. During the past month, have you often been bothered by feeling sad, or hopeless? 2. During the past month, have you often felt little interest or pleasure in doing things? • Not at all (0 points). • Nearly every day (3 points).
Suicide Risk	1. Have you had thoughts of hurting or killing yourself? If yes, when, how often etc? 2. Do you have a plan to kill yourself? What is your plan? (This will indicate likely risk). Do you have the means (methods) to do so? 3. Have you ever tried to kill yourself? If yes, when and how? (This will give you an indication of the severity of prior attempts).

Post-Traumatic Stress Disorder (PTSD)

PTSD may result from exposure to a stressful situation of an exceptional nature (e.g. being the victim of torture, rapes or beatings, observing or acting in armed conflict, or witnessing the violent death of relatives or friends) (9). PTSD is a common disorder in individuals exposed to armed conflict and is common in South Sudan (4, 5, 10). Individuals with PTSD may experience physical symptoms associated with their stress. An example is a Sudanese refugee who presented with chronic abdominal and back pain. Medical causes were excluded and it was realized that his pain was part of his PTSD which improved with antidepressant medication (11). Depression and PTSD frequently occur together so one must screen for both conditions. Someone exposed to a traumatic event has PTSD if they experience at least one symptom from cluster B, at least 3 symptoms from cluster C, and at least 2 symptoms from cluster D consistently for at least one month and their symptoms cause significant disruption to their personal and professional life. (See tables 3 and 4)

Treatment Approach to Patients with Common Mental Disorders

As some medical conditions can present with or imitate psychiatric symptoms, it is important to first exclude common medical causes such as infection (malaria, typhoid, HIV), medication reactions, and toxic/metabolic or endocrine abnormalities (13). Once a psychiatric diagnosis is confirmed, you can consider treatment possibilities that typically include a combination of medications and most importantly psychological and social interventions. Medications may help but require close monitoring for side effects. (see table 5)

Community and Psychosocial Interventions: Psychosocial interventions in the form of religious groups, friends, family and tribal structures, are some of the most important tools to help patients with depression and PTSD feel better. A review article on the mental health of South Sudanese refugees in the Diaspora found that mechanisms of coping with emotional distress, including encouraging connections with others, group social support and sharing experiences, helped to ease emotional difficulties (14). Health care providers can help patients feel better by (14):

- Focusing attention on positive things in the future and away from negative situations
- Helping patients accept difficulties in life
- Helping patients create meaning from suffering
- Focusing patients on productive activities

Table 3. Diagnostic Criteria for PTSD

Symptoms	CLUSTER B –**1 or more** of the following symptoms for at least **one month** • Recurrent distressing memories of the event, including images or thoughts • Recurrent distressing dreams of the event • Acting or feeling as if the trauma was recurring (includes a sense of actually re-living the event) • Intense emotional distress when exposed to something that reminds you of the trauma • Physical symptoms like rapid heart rate, sweating, and tremors when exposed to something that reminds you of the trauma
	CLUSTER C – **3 or more** of the following symptoms for at least **one month** • Avoiding thoughts, feelings, or conversations associated with the trauma • Avoiding activities, places, or people that cause you to remember the trauma • Inability to recall an important part of the trauma • Decreased interest or participation in usually important activities • Feeling disconnected from others or feeling alone when surrounded by family or friends • Limited range of emotions (rarely able to laugh or smile) • Sense of no hope for the future (e.g., does not expect to have a job, marriage, children)
	CLUSTER D: **2 or more** of the following symptoms for at least **one month** • Hypervigilance (always on guard for threats) • Easily startled or scared • Difficulty falling asleep or staying asleep • Irritability or outbursts of anger • Difficulty concentrating

Table 4. Screening Questions for PTSD

If willing, encourage the patient to talk about the trauma. Some people are not ready to share their story immediately. If this is the case, it is not recommended to force a person to tell their story. The patient may begin to feel more comfortable with time and eventually be ready to discuss their experience. Start by asking questions like:

"Some people have difficult experiences like being attacked or threatened with a weapon; being raped; or seeing someone being badly injured or killed. Has anything like this ever happened to you?"

IF YES:

"In the past 3 months, have you had recurrent dreams or nightmares about this experience, or recurrent thoughts or times when you felt as though it was happening again, even though it wasn't?"

- Helping patients compare themselves with those who are less fortunate

Pharmacologic Interventions (15): There are few psychiatric medications available in South Sudan. Health care workers can use the following medications to treat depression and PTSD – which should be used in combination with community and psychosocial interventions., as shown in table 6.

Depression Treatment

Refer to table 7.

PTSD Treatment

Refer to table 8.

Conclusion

Exposure to prolonged violence, displacement, and hardship has put the people of South Sudan at risk of emotional distress. Therefore, it is essential for health care providers in South Sudan to focus on both physical and mental well-being. Advocacy, training, and research are desperately needed. Broad recommendations to strengthen mental health service provision are discussed in Part II.

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Table 5. Treatment Algorithm

- EVALUATE presence of symptoms
- EXCLUDE common medical disorders that may cause psychiatric symptoms
- CONSIDER the differential diagnoses for mental disorders based on the symptoms mentioned above
- START MEDICATION/PSYCHOSOCIAL INTERVENTION depending on the psychiatric illness
- ASSESS RESPONSE: See the patient back in clinic > assess presence of symptoms and response to medication.
- If complete resolution of symptoms > continue treatment at current dose
- If partial or no improvement > increase dose based on guidelines and reassess symptoms
- REASSESS RESPONSE frequently at the beginning of treatment:

a. If complete resolution of symptoms > continue medication at therapeutic dose for the recommended time frame depending on the condition (please see table below).

b. If no response, worsening thoughts of self-harm, or new psychotic symptoms > seek consultation with mental health expert by any means necessary (including phone or internet)

Table 6. Pharmacologic Treatment for Depression and PTSD

	Fluoxetine	**Amitriptyline**	**Diazepam**	**Chlorpromazine**
Uses	Depression, PTSD	Depression, PTSD	PTSD	Severe Depression, PTSD
Common Side effects	Occurs when starting (typically improves): •Nausea, diarrhea, constipation •Poor sleep •Tiredness, anxiety Long-term: •Sexual dysfunction (Treat by lowering dose)	•Dry mouth, constipation, blurred vision, urinary retention •Fatigue, weakness, dizziness, sedation •Sexual dysfunction •Weight gain and increased appetite	•Sedation, fatigue, depression •Dizziness, ataxia, slurred speech, weakness •Forgetfulness, confusion	•Sexual Dysfunction •Dry mouth, constipation, urinary retention •Weight gain •Sedation •Low blood pressure, tachycardia • Photosensitivity
Risks of Medication	•Skin rash (should stop the drug)	•Heart problems (QTc prolongation, arrhythmias) •Seizures •Liver failure	•Dependence/abuse Overdose > respiratory depression > coma • Withdrawal syndrome > irritability, tremor, hallucinations, seizures	•Involuntary movements • Heat stroke •Bone marrow suppression • Rare seizures •Neuroleptic malignant syndrome (*Temperature >38°C, delirium, sweating, rigid muscles, autonomic imbalance*)
Reassess	•Assess symptoms/ side effects every 2 weeks initially •Increase by 20mg to MAX dose every 3-4 weeks if no improvement	•Assess symptoms/ side effects every week initially •Increase by 25mg every 3-7 days to reach MAX dose if no improvement	•Assess symptoms/ side effects every 2-3 days initially •Increase by 1-2mg every 2-3 days up to MAX dose if no improvement •Should be used for (no longer than 12-16 weeks) given high abuse/ dependence potential •Taper by 1-2mg every 3-7 days as withdrawal/ seizures can occur if stopped abruptly	•Assess symptoms and side effects every 1-2 days initially •Increase by 20-50 mg/ day every 3-4 days •Start lower/titrate slower in older patients •Taper over 6-8 weeks to avoid rebound psychosis
	•Clinical response may be delayed up to several weeks after initiation •Taper medication over >4 weeks) as withdrawal syndrome can occur if stopped abruptly			

*All medications should be used with caution in women of childbearing age given possible teratogenic effects during pregnancy and lactation. The listed side effects are not exhaustive and all medications should be monitored closely.

Table 7: Depression Treatment

	Medications	Starting Dose	Effective Dose Range
Depressed Mood	Amitriptyline	25 mg/day / by mouth	50 – 150mg/day At night or in divided doses.
	Fluoxetine (Clinical response may be delayed)	20 mg/day / by mouth	20 – 80mg/ day (20mg -40mg usually) In the morning.
	•Fluoxetine is safer with fewer side effects than amitriptyline •If improvement in symptoms treat at same dose for 6-12 months •Consider maintenance (long-term) treatment in patients with >3 episodes of depression		
Psychosis	Chlorpromazine	30 – 75mg/ daily by mouth	200 – 800mg/day At night or divided doses
	•Increase dose until psychotic symptoms are controlled; after two weeks reduce to lowest effective dose (25 – 50mg IM can be used as needed for severe agitation)		

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Table 8: PTSD treatment

Target Symptoms	Medications	Starting Dose	Effective Dose Range
Angry outbursts Disturbing imagery Severe agitation	Chlorpromazine	30 – 75mg/daily By mouth	200 – 800mg/day At night or in divided doses. Can be used IM as needed for severe agitation/violence
Depression Nightmares Flashbacks	Fluoxetine	10 – 20mg/day By mouth	10 – 80mg/day In morning (Can start with 20mg every other day)
	Amitriptyline	10– 25 mg/day By mouth	10– 150 mg/day At night or in divided doses
Irritability Hypervigilance	Diazepam SECOND LINE	2– 5 mg/day By mouth	2– 40 mg/day Divided doses
	•Use medications to target symptoms described by patient •If symptoms improve continue medication for at least 6-12 months except for diazepam given dependence/addiction potential •If symptoms recur, restart therapy and continue indefinitely		