Post-conflict mental health in South Sudan: Overview of common psychiatric disorders
Part 2: Anxiety and substance abuse

Maithri Ameresekere[a], MD, MSc and David C. Henderson[a], MD

Introduction

Mental illness has a profound and often underestimated impact on the health and functioning of individuals and communities in post-conflict societies. Part I of this series provided an overview of depression and post-traumatic stress disorder (PTSD); Part II focuses on anxiety and substance use, including alcohol withdrawal. Anxiety, substance abuse, and substance abuse-related complications such as alcohol withdrawal are frequently seen in post-conflict settings (1). Alcohol and drug abuse is a growing concern in South Sudan as increasing social freedom and access to alcohol and drugs bring increased risk for excessive use and harmful consequences (2). As a result, health care providers must have the knowledge to screen, diagnose, and treat anxiety, substance abuse, and alcohol withdrawal.

This article provides:

- Signs and symptoms for each condition, screening questions to assess risk, and treatment suggestions for anxiety, substance abuse, and alcohol withdrawal.
- Broad recommendations to strengthen mental health service provision for common mental disorders including depression, PTSD, anxiety, and substance abuse.

Anxiety (Excessive worry)

While worry is normal in certain situations, it becomes problematic when the worrying is continuous, out of proportion to what is actually happening in a person's life, or interferes with normal activities (3). Depression and anxiety often occur together so it is important to ask questions about both excessive worry and depressed mood. Someone has clinical anxiety when they have excessive worry most of the day, nearly ever day for at least 6 months, near constant worry that causes significant impairment in important areas of life, worry that is difficult to control and at least 3 of the following additional symptoms (Tables 1 and 2).

a The Chester M. Pierce, MD Division of Global Psychiatry, Massachusetts General Hospital, Boston, and Harvard Medical School, 25 Shattuck Street, Boston, USA. mameresekere@partners.org

Substance abuse

Excessive use of alcohol and drugs can lead to neglect of personal responsibilities, legal problems, conflict with loved ones, and danger to personal health and safety. Patients with untreated depression, anxiety, or post-traumatic stress disorder may use alcohol or drugs as a means to cope or treat their symptoms. However, alcohol or drugs may actually worsen these symptoms. Someone is abusing alcohol and drugs when one or more of the following symptoms occur in a 12-month period (Table 3).

Substance Dependence

Prolonged and excessive use of alcohol and drugs can cause the body to become physically dependent on the substance. Over the long term, physical dependence can result in physical harm, medical illness, behavioral problems, and damage to personal and professional relationships. Additionally, stopping alcohol or drugs abruptly after excessive and chronic use can cause uncomfortable physical symptoms of withdrawal. Symptoms like sad mood, poor sleep, anxiety, irritability, nausea, agitation, fast heart rate, and high blood pressure are common symptoms when withdrawing from alcohol

Table 1. Diagnostic Criteria for Anxiety (4)

Symptoms	Continuous nervousness/worry/stress for at least 6 months + 3 or more of the symptoms below: • Restlessness or feeling like something bad is going to happen • Being easily tired • Difficulty concentrating or focusing • Irritability • Muscle tension • Sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)

Table 2. Suggested Screening Questions for Anxiety (3)

Anxiety Risk	1. Have you been continuously worried or stressed for a long period of time? 2. Would you say that being stressed or worried prevents you from performing your daily activities?

OR drugs. In the case of alcohol withdrawal, abruptly stopping alcohol after heavy use can cause seizures and delirium. Due to the life-threatening nature of alcohol withdrawal, we focus on the diagnostic criteria for alcohol dependence. Someone is dependent on alcohol when three or more of the following symptoms occur in a 12-month period (Table 4).

Screening for substance abuse and dependence: Questions related to substance abuse can be sensitive, and patients may deny or lessen their reporting of alcohol or drug use to health care workers. A non-judgmental attitude encourages people to report their symptoms honestly. When concerned about alcohol abuse and dependence, you can use the AUDIT (Alcohol Use Disorders Identification Test) Questionnaire developed by the World Health Organization to assess risk (5). Points are assigned to each answer and then added up. A score of more than 8 suggests a serious alcohol problem (Table 5).

Screening for alcohol withdrawal: If you are concerned that a patient is withdrawing from alcohol it is important to measure their symptoms to help you decide the amount and frequency of medication needed to avoid seizures and delirium. The Clinical Institute Withdrawal Assessment for Alcohol (CIWA) scale is a useful tool to measure the severity of alcohol withdrawal symptoms. The CIWA scale measures 10 categories of symptoms, with a range of scores from 0 through 4 or 0 through 7 in each category. The health care worker assigns a number

Table 3. Diagnostic Criteria for Substance Abuse (4)

Symptoms	One or more of the following symptoms in a 12-month period: • Recurrent alcohol or drug use resulting in a failure to fulfill obligations at work, school, or home (e.g. repeated absences or poor work performance; neglect of children or household). • Recurrent alcohol or drug use in situations in which it is physically dangerous (e.g. driving a car or operating a machine). • Recurrent alcohol or drug related legal problems (e.g. arrests for alcohol-related violence). • Continued alcohol or drug use despite social or personal problems caused or made worse by their use (e.g. arguments with spouse or physical fights).

Table 4. Diagnostic Criteria for Alcohol Dependence (4)

Symptoms	3 or more of the following symptoms in a 12-month period: • Tolerance, defined by either: (a) Need for increased amounts of alcohol to have the desired effect (b) Decreased effect with continued use of the same amount of alcohol • Withdrawal, as defined by either of the following: (a) Withdrawal syndrome occurs when you stop drinking alcohol (or decrease use) after heavy and chronic drinking. Withdrawal is defined by: Two (or more) of the following occurring several hours to a few days after stopping heavy or chronic drinking: 1. Autonomic hyperactivity (e.g. sweating or pulse rate greater than 100) 2. Increased hand tremor 3. Inability to sleep 4. Nausea or vomiting 5. Transient visual, auditory, or tactile hallucinations 6. Increased agitation or activity 7. Anxiety 8. Seizures (b) Alcohol consumption to relieve or avoid withdrawal symptoms • Increasing use of alcohol in larger amounts or over longer periods of time than originally intended • Desire to stop drinking or unsuccessful efforts to cut down or control alcohol use • Increasing time spent buying, consuming, or recovering from effects of alcohol abuse • Performing poorly or giving up important social, occupational, or personal activities because of alcohol use • Continued alcohol use despite physical or psychological problems that are caused or worsened by alcohol (e.g. continued drinking despite knowing that an ulcer is made worse by drinking alcohol)

Table 5. Screening for Alcohol Abuse/Dependence (5)

1) How often do you have a drink containing alcohol? 0=Never 1=Monthly or Less 2=Two to Four Times/Month 3=Two to Three Times/ Week 4=Four+ Times/ Week	2) How many drinks containing alcohol do you have on a typical day when you are drinking? 0=None 1=One or Two 2=Three or Four 3=Five or Six 4=Seven to Nine 5=Ten or More
3) How often do you have six or more drinks on one occasion? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily	4) How often during the last year have you found that you were unable to stop drinking once you had started? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily
5) How often during the last year have you failed to do what was normally expected from you because of drinking? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily	6) How often during the last year have you needed a first drink in the morning to get going after a heavy drinking session? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily
7) How often during the last year have you had a feeling of guilt or remorse after drinking? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily	8) How often during the last year have you been unable to remember the night before because you had been drinking? 0=Never 1=Less than Monthly 2=Monthly 3=Weekly 4=Daily or Almost Daily
9) Have you or someone else been injured as the result of your drinking? 0=Never 2=Yes, but not in the last year 4=Yes, during the last year	10) Has a relative, doctor, friend, or health professional been concerned about your drinking or suggested you cut down? 0=Never 2=Yes, but not in the last year 4=Yes, during the last year

for severity within each symptom category. Symptoms that are assessed include nausea, vomiting, tremor, sweats, headache, anxiety, agitation, tactile, auditory and visual disturbances, and orientation. Based on the symptom scale, the numbers are added up to obtain one score that indicates the severity of alcohol withdrawal. The maximum score is 67. Minimal-to-mild withdrawal symptoms result in a total score of less than 8; moderate withdrawal symptoms has a total score of 8 to15; and severe withdrawal symptoms has a total score of more than 15 (6). High scores are predictive of seizures and delirium. The CIWA scale can be found in Figure 1 at the following link (7): http://www.aafp.org/afp/2004/0315/p1443.html

Treatment Approach for Patients with Anxiety and Substance Abuse/Dependence

As some medical conditions can present with or mimic psychiatric symptoms, it is important to exclude common medical causes like infection (malaria, typhoid, HIV), medication reactions, and toxic/metabolic or endocrine abnormalities before making a diagnosis of anxiety, substance abuse, or alcohol withdrawal (8).

Substance Abuse Treatment

Community and Psychosocial Interventions: Social support in the form of religious groups, friends, family, and tribal structures may help patients with substance abuse problems stop drinking alcohol and doing drugs. Health care providers can help their patients stop abusing alcohol and drugs by:

- Trying to understand what motivates someone to drink or do drugs.
- Treating underlying psychiatric illness like depression, anxiety, or PTSD. (People may be abusing alcohol or drugs to ease suffering associated with these

conditions)

- Assessing whether someone is ready to stop drinking or doing drugs and providing help if they are ready
- Encouraging abstinence from drinking or doing drugs without judging their behavior
- Providing emotional and family support.

Alcohol Withdrawal Treatment

Alcohol withdrawal is a life-threatening illness with the potential for seizures, delirium, and death if untreated. See table 8 for possible treatment strategies.

Conclusion

Advocacy, training, and research are needed to identify the scope of mental illness and provide culturally-meaningful interventions to treat common mental disorders in South Sudan. Future steps to strengthen mental health services in South Sudan include:

ADVOCACY: Reducing stigma associated with mental disorders, creating awareness about mental illness, and advocating for appropriate mental health services are necessary steps to reduce the burden of psychiatric disease. Advocacy should occur at multiple levels including:

o Lobbying the government to create a comprehensive national mental health policy that prioritizes mental health interventions that are mindful of the cultural context and meet the needs of the population.

o Lobbying the Ministry of Health to expand psychiatric drug coverage. Currently there is a limited selection of drugs available to treat common mental disorders. Amitriptyline is one of the few anti-depressants that is widely available; however, fluoxetine (also available on the WHO formulary) is safer and easier to administer and can be used to treat the debilitating effects of depression, anxiety and PTSD.

o Educating the public in an effort to reduce stigma and create awareness about signs and symptoms of mental illness. Early detection and treatment of psychiatric illness will serve to reduce the damaging personal, social, and public health consequences of untreated mental disorders.

TRAINING: Health care providers at all levels should be trained to screen, diagnose, treat, and seek help for individuals suffering from depression, PTSD, anxiety, substance abuse, or withdrawal. Training is particularly important for:

o General practitioners who are exposed to a high prevalence of mental illness in their everyday practice.

Table 6. Treatment Algorithm: Anxiety (9)

- EVALUATE presence of symptoms according to diagnostic criteria
- EXCLUDE common medical disorders that cause anxiety
- CONSIDER the differential diagnoses based on symptoms
- START Medication/Psychosocial Intervention
- ASSESS RESPONSE: See the patient back in clinic > assess presence of symptoms and response to medication.
  a. If complete resolution of symptoms > continue treatment at current dose
  b. 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
  b. If no response > seek consultation with mental health expert by any means necessary

Table 7: Anxiety Treatment (9)

Medications	Starting Dose	Effective Dose Range
Fluoxetine (Clinical response may be delayed)	10 – 20 mg/day	20 – 80mg/day In the morning
Diazepam SECOND LINE High abuse potential	2 - 5 mg/day	2 - 40 mg/day At night or in divided doses
- Fluoxetine is safer and less addictive than diazepam and preferred if available - If symptoms improve > continue fluoxetine for at least 4-6 months - Taper dose gradually as stopping abruptly can cause withdrawal syndrome - If symptoms gradually reappear after stopping treatment > Restart therapy and continue indefinitely		

Table 8. Treatment Algorithm for Alcohol Withdrawal (10)

- EVALUATE presence of withdrawal symptoms and day of last drink
- EXCLUDE common medical disorders that cause withdrawal symptoms
- MEASURE SYMPTOMS using the CIWA scale
  - **CIWA score < 8:** Psychosocial interventions for substance abuse
  - **CIWA score 8 – 15:** Psychosocial intervention + Outpatient alcohol detoxification:
    Give - Thiamine 100 mg orally/day
    Consider folic acid and multivitamin if available
    Give Diazepam 10 - 20 mg every 6 hours for 4 doses, then 5-10 mg every 6 hours for 8 doses
  - **CIWA score of >15:** Consider admission to the hospital for detoxification
    - Give Thiamine 200 mg IM/IV x 1 (then 200mg orally twice daily), Folic acid 1 mg orally daily, and a multivitamin orally daily
    - Measure CIWA every 1 - 2 hours
      * If CIWA > 10 : GIVE Diazepam 10 - 20mg orally
      * Re-measure CIWA 1 hour later (wake up patients to assess withdrawal even if sleeping) if CIWA >10: Give Diazepam 20mg
      * Give Diazepam 10 - 20mg every 1 – 2 hours based on symptoms measured by CIWA score
    - Reassess response every hour at beginning of treatment:
      * If the patient consistently has complete resolution of symptoms > begin to reduce frequency of diazepam slowly over several days
      * If no improvement in symptoms with Diazepam, seizures, delirium or CIWA persistently >15 for several hours despite appropriate treatment > seek consultation with expert by any means necessary (including phone or internet).

* Monitor closely for respiratory depression when treating alcohol withdrawal with Diazepam. Fluid resuscitation and correction of electrolyte abnormalities are important components of alcohol withdrawal management.

o Medical graduates/students who should be encouraged to pursue further training in mental health. Psychiatrists need to be multi-talented, able to differentiate mental illness from medical illness, manage psychiatric medications and their side effects, and make patients feel comfortable about revealing deeply personal fears and concerns. It is critically important to invest in the mental health workforce of South Sudan in order to meet the mental health needs of an expanding population exposed to significant armed conflict and trauma. Additionally, psychiatrists will be an important source of expertise and referral for the severely mentally ill and for patients who do not respond to standard treatments.

RESEARCH: Currently, there is limited mental health data from South Sudan. Scientifically-rigorous information on prevalence of mental disorders, culturally-validated screening and diagnostic tools for common mental disorders, and effective traditional and non-traditional mental health interventions are needed to provide effective, culturally-specific care to the citizens of South Sudan.

References:

1. de Jong JT, Komproe IH, Van Ommeren M. 2003 Common mental disorders in postconflict settings *Lancet*; 361(9375): 2128-30
2. King. 2006 Alcohol a Growing Problem in South Sudan *Voice of America*
3. Patel V. 2008 Where there is no psychiatrist: a mental health care manual. London: Gaskell
4. American Psychiatric Association. 2000 American Psychiatric Association. Task Force on DSM-IV. Diagnostic and statistical manual of mental disorders: DSM-IV-TR. 4th ed. Washington, DC: American Psychiatric Association
5. Bohn MJ, Babor TF, Kranzler HR 1995 The Alcohol Use Disorders Identification Test (AUDIT): validation of a screening instrument for use in medical settings *J Stud Alcohol*; 56(4): 423-32
6. Kosten TR, O'Connor PG 2003 Management of drug and alcohol withdrawal *N Engl J Med*; 348(18): 1786-95
7. Bayard M, McIntyre J, Hill KR, Woodside J, Jr. 2004 Alcohol withdrawal syndrome *Am Fam Physician*; 69(6): 1443-50
8. Williams ER, Shepherd SM. 2000 Medical clearance of psychiatric patients *Emerg Med Clin North Am*; 18(2): 185-98, vii
9. Henderson DC. undated. Statewide Network of Local Care to Survivors of Torture: Psychopharmacology Introduction. Powerpoint. Boston Harvard Program on Refugee Trauma
10. Asplund CA, Aaronson JW, Aaronson HE. 2004 3 regimens for alcohol withdrawal and detoxification *J Fam Pract*; 53(7): 545-54