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# Systemic effects of excessive alcohol consumption

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**Abstract:** This article presents priority nursing assessments and interventions that address the multicellular assault of excessive alcohol consumption on bodily organs and the impact on the patient's quality of life.

**Keywords:** alcohol abuse, alcohol use disorder, binge drinking, excessive alcohol consumption, excessive alcohol drinking, heavy drinking

Excessive alcohol consumption (EAC) causes approximately 140,000 deaths in the US annually, leading to numerous acute and chronic illnesses.<sup>1</sup> Globally, nearly 3 million people die annually from EAC's harmful effects, constituting 5.3% of all deaths.<sup>2</sup> The economic burden of EAC is \$249 billion each year related to a loss in workplace productivity, motor vehicle crashes, legal issues, and healthcare.<sup>2-5</sup> EAC impacts all body organs and systems and causes many diseases and conditions.<sup>6-9</sup> In addition, the health of those around the person engaging in EAC can be adversely affected and lead to social distress, such as divorce and termination from a job.<sup>2</sup>

Intoxication, poor judgment, mood instability, and aggression during EAC may result in intentional or unintentional injury to the individual and others.<sup>2</sup> This article presents priority nursing assessments and interventions that address the multicellular assault of EAC on bodily organs and the impact on the patient's quality of life.

**Prevalence and epidemiology**  
Approximately 55% of men and 51% of women consume alcohol each month.<sup>2,10-13</sup> Moderate alcohol consumption limits intake to 2 drinks on any given day for men and 1 drink for women (see *Standard drink sizes in the US*).<sup>10-13</sup>

## Standard drink sizes in the US<sup>10</sup>

Amount	Description
1.5 fl oz	40% (80-Proof) ABV distilled spirits such as gin, rum, vodka, and whiskey
5 fl oz	12% ABV wine
8 fl oz	7% ABV malt liquor
12 fl oz	5% ABV beer

Abbreviation: ABV = alcohol by volume

EAC is a global term encompassing binge and heavy drinking.<sup>10-13</sup> Binge drinking occurs when a man consumes 5 or more drinks, and a woman consumes 4 or more drinks, in 2 hours.<sup>10-13</sup> Of all people who consume alcohol in the US, 29.7% of men and 22.2% of women binge drink.<sup>2</sup> Heavy drinking occurs when a man consumes 4 or more drinks in 1 day or at least 14 drinks in a week, and when a woman consumes 3 or more drinks in 1 day or at least 7 drinks in a week.<sup>10-13</sup>

Heavy drinking is much less prevalent in men and women than binge drinking. Of all people who consume alcohol in the US, 7% of men and 6% of women engage in heavy drinking.<sup>10-13</sup> Binge and heavy drinking bring the blood alcohol concentration to 0.08 grams of alcohol per deciliter or higher, causing slurred speech, incoordination, unsteady gait, nystagmus, impairment of attention or memory, and stupor or coma.<sup>10</sup>

About 39 million people in the US drink excessively; only 1 in 6 have visited a physician or advanced practice clinician about their drinking pattern.<sup>2,7</sup> More than 14 million adults in the US have been diagnosed with alcohol use disorder (AUD).<sup>11,12</sup>

AUD and EAC are not necessarily the same thing. Many people who engage in EAC are not dependent on alcohol. However, they are at an increased risk for developing AUD.<sup>11,12</sup>

Active AUD is a progressive, chronic illness characterized by the inability to control drinking despite health, work, or social repercussions.<sup>11,12</sup> Ac-

tive AUD means the person continues to consume alcohol despite ill effects; a person with AUD who abstains from alcohol consumption is considered in recovery. A person is diagnosed with AUD when they meet 2 or more of the 11 criteria for AUD occurring serially or simultaneously within 12 months, according to the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM 5).<sup>11,12</sup> Selected examples of criteria include: (1) Alcohol is consumed in larger amounts or over longer periods than planned, (2) Unsuccessful efforts to cut down or control alcohol intake, (3) Craving or a strong desire to use alcohol, and (4) Exhibiting alcohol withdrawal syndrome when alcohol consumption is reduced.

Risk factors for AUD include steady drinking over time, early childhood trauma, depression, low self-esteem, chronic illness, and having a parent with AUD.<sup>11,12,14</sup> Adverse childhood experiences are traumatic situations—physical, emotional, and sexual abuse, domestic violence, parental discord, and parental substance use disorder—that place a child at high risk for developing cognitive, emotional, and social impairment, including misuse and abuse of alcohol.<sup>14</sup> Approximately 40%-60% of people with AUD have genetic influences.<sup>11,12</sup> EAC leads to falls, drownings, motor vehicle crashes, unsafe sexual behaviors, drug overdoses from combining other substances and drugs with alcohol, and breakdown in relationships.<sup>2</sup> The abuse and misuse of

alcohol is responsible for more pathologic conditions than any other addictive substance.<sup>11,15,16</sup>

### Effects on body organs and systems

EAC impairs every body organ and system.<sup>9,17-27</sup> Vitamin B1 (thiamine) plays a significant nutritional role in EAC as it is necessary to convert carbohydrates into energy and for optimal functioning of the muscles and central and peripheral nervous, gastrointestinal, hepatobiliary, cardiovascular, and immune systems.<sup>9,22,25,28</sup> Thiamine must be obtained from nutritional sources because it is not manufactured naturally in the body.<sup>22,25,28</sup> People who engage in EAC may not have a sufficient intake of nutrients in their diet, including thiamine.<sup>22,25,28</sup> Alcohol also interferes with nutrient absorption, leading to thiamine deficiency and subsequent central and peripheral nervous system dysfunction.<sup>22,25,28</sup> Alcohol is degraded in the liver by the enzyme alcohol dehydrogenase and an intricate system of enzymes called the microsomal ethanol-oxidizing system that generates acetaldehyde. This toxic, carcinogenic substance interferes with nutritional metabolism.<sup>9,15,23,26</sup>

#### Gastrointestinal effects

Gastritis, gastric ulcers, duodenal ulcers, cirrhosis, pancreatitis, and bleeding gastric and esophageal varices occur in at least 15% of people who engage in EAC.<sup>8,9,23,26</sup> Such individuals have increased susceptibility to oral, esophageal, and gastric carcinoma from the toxic effects of alcohol on mucosa and the breakdown of alcohol to acetaldehyde.<sup>8,9</sup>

#### Cardiovascular effects

EAC causes hypertension and accelerates coronary artery disease by increasing triglycerides and low-density lipoprotein cholesterol, leading to cardiomyopathy, myocardial infarction, heart failure, and stroke.<sup>8,9,21</sup>

## Systemic effects of EAC and assessment findings<sup>1,3,6-9,15-28</sup>

System	Assessment findings
<b>Central and peripheral nervous systems</b>	<ul style="list-style-type: none"> <li>• Altered level of consciousness, mood, and affect</li> <li>• Altered speech, memory, and attention</li> <li>• Apraxia: Inability to carry out skilled movement and gestures</li> <li>• Nystagmus, impaired reflexes, tremors, seizures</li> <li>• Impaired gait and balance</li> <li>• Impaired sensory and general motor movement</li> <li>• Paresthesia with or without pain in the feet, fingers, and lips</li> <li>• Impaired bowel, bladder, and sexual function</li> <li>• Elevated blood alcohol level</li> <li>• Elevated serum ammonia level from hepatic encephalopathy</li> <li>• Abnormal Psychometric Hepatic Encephalopathy Score</li> <li>• Abnormal brain CT and MRI, EEG</li> <li>• Electrolyte imbalances</li> <li>• Nutritional deficiencies, particularly thiamine</li> <li>• Altered sleep pattern (alteration in rapid eye movement)</li> </ul>
<b>Hepatobiliary and gastrointestinal systems</b>	<ul style="list-style-type: none"> <li>• Altered level of consciousness, mood, and affect</li> <li>• Bleeding and easy bruising</li> <li>• Increased weight and abdominal girth</li> <li>• Jaundice and pruritus</li> <li>• Melena and hematochezia</li> <li>• Acholic stools</li> <li>• Anorexia, nausea, vomiting, and abdominal pain</li> <li>• Elevated serum ALT, AST, alkaline phosphatase, amylase, lipase, and bilirubin levels</li> <li>• Altered serum sodium, potassium, and chloride levels</li> <li>• Altered acid-based balance</li> <li>• Decreased serum albumin and protein levels</li> <li>• Elevated serum ammonia level</li> <li>• Elevated serum creatinine, BUN, and decreased eGFR</li> <li>• Decreased RBCs, Hgb, HCT, PLT, and prolonged aPTT</li> </ul>
<b>Cardiovascular system</b>	<ul style="list-style-type: none"> <li>• Chest, arm, or back pain, pressure, or discomfort</li> <li>• Symptomatic or asymptomatic hypotension and hypertension</li> <li>• Decreased amplitude of pulses</li> <li>• Elevated D-dimer</li> <li>• Dysrhythmias</li> <li>• Abnormal ECG, echocardiogram</li> <li>• Elevated serum B-type natriuretic peptide</li> <li>• Elevated serum low-density lipoprotein and triglyceride levels</li> <li>• Shortness of breath and cough</li> <li>• Fatigue, lightheadedness, and dizziness</li> <li>• Pulmonary crackles and wheezing</li> <li>• Abnormal chest X-ray</li> <li>• Oxygen saturation below 94%</li> <li>• Peripheral edema</li> <li>• Alteration in mental status</li> <li>• Alterations in pupillary size, equality and response to light</li> <li>• Stroke signs or symptoms</li> </ul>

(Continues)

## Systemic effects of EAC and assessment findings<sup>1,3,6-9,15-28</sup> (Continued)

System	Assessment findings
<b>Pulmonary system</b>	<ul style="list-style-type: none"> <li>• Chest pain, pressure, or discomfort</li> <li>• Fatigue and shortness of breath</li> <li>• Pulmonary crackles and wheezing</li> <li>• Productive and nonproductive cough and hemoptysis</li> <li>• Oxygen saturation below 94%</li> <li>• Fever, fatigue, night sweats, and weight loss</li> <li>• Abnormal chest X-ray</li> <li>• Pulmonary embolism on CT pulmonary angiography</li> <li>• Abnormal pulmonary function tests</li> <li>• Hypoxia and hypercarbia</li> <li>• Coma</li> </ul>
<b>Renal system</b>	<ul style="list-style-type: none"> <li>• Abdominal and flank pain or discomfort</li> <li>• Fatigue and anorexia</li> <li>• Urinary tract infection</li> <li>• Proteinuria, albuminuria, and hematuria</li> <li>• Elevated creatinine and decreased eGFR</li> <li>• Fluid retention and weight gain</li> <li>• Alteration in serum electrolytes, especially potassium and sodium</li> <li>• Decreased RBCs</li> <li>• Abnormal results of renal CT, ultrasound, and biopsy</li> <li>• Hepatorenal syndrome from portal hypertension</li> </ul>
<b>Endocrine and immune systems</b>	<ul style="list-style-type: none"> <li>• Alteration in body temperature</li> <li>• Fluctuation in A1C</li> <li>• Muscle atrophy and weakness</li> <li>• Impaired absorption of calcium leading to osteoporosis</li> <li>• Infection from a reduction in immune system cells</li> <li>• Alteration in gonadotropin-releasing hormone, estrogen, testosterone, luteinizing hormone, follicle-stimulating hormones, cortisol, aldosterone, thyroid hormone, vitamin D, immunoglobulins</li> <li>• Abnormal findings of thyroid and parathyroid glands by ultrasound and CT</li> <li>• Males: Decreased testosterone, decreased libido and sexual performance, atrophy of testicles, gynecomastia (breast tissue), infertility, and increase in fatty abdominal tissue</li> <li>• Females: Decreased testosterone, decreased libido and sexual performance, menstrual irregularity, infertility, and miscarriage</li> </ul>
<b>Nutritional impact</b>	<ul style="list-style-type: none"> <li>• Central nervous and peripheral nervous systems symptoms</li> <li>• Anorexia, body weight and BMI reduction</li> <li>• Mineral and vitamin levels, iron levels decreased</li> <li>• Hypoproteinemia and hypoalbuminemia</li> <li>• Fatigue and low energy levels</li> <li>• Poor skin turgor</li> <li>• Teeth decay/gingivitis</li> <li>• Feeling cold most of the time</li> <li>• Frequent illness/long recovery time/slow wound healing</li> <li>• Thin, dry skin and hair</li> <li>• Sunken eyes</li> <li>• Depletion of muscle, fat, and organ mass</li> <li>• Irritability, lack of concentration, depression</li> </ul>

Abbreviations: BUN, blood urea nitrogen; CT, computed tomography; EEG, electroencephalogram; eGFR, estimated glomerular filtration rate

### Neurologic effects

Peripheral neuropathy is a common symptom in EAC manifested by paresthesia with or without pain, diminished peripheral sensation, muscle weakness, gait imbalance, and injuries from falls or burns.<sup>7-9</sup> Thiamine deficiency and the toxic effects of alcohol on neurons underpin these symptoms.<sup>7-9,22</sup> Bowel, bladder, and sexual dysfunction may occur with peripheral nerve involvement.<sup>7-9</sup> The central nervous system effects include a deficit in cognitive ability, severe impairment in memory, and degradation of the cerebellum, causing cerebellar ataxia—difficulty with muscle movement, coordination, postural stability, and balance—from a deficiency in B vitamins, particularly thiamine.<sup>6-9,17,18,24</sup>

A devastating EAC-induced chronic and incurable amnesia disorder, known as Wernicke-Korsakoff Syndrome, may occur from a deficiency in thiamine.<sup>12,22,27</sup> Amnesia is caused by atrophy of the hypothalamus, thalamus, and mamillary bodies secondary to a thiamine deficiency.<sup>18,22,25,28</sup>

### Additional effects

Other possible complications of EAC on body organs and systems include fluctuating blood glucose levels; increased susceptibility to infection, including pneumonia; osteoporosis; electrolyte imbalances; fluid volume imbalances; hormone dysfunction; infertility; skin breakdown; and chronic pain syndromes (see *Systemic effects of EAC and assessment findings*).<sup>7-9,17-28</sup> Depression, impulsivity, personality disorders, and socialization-related problems often coexist with the physical repercussions of EAC.<sup>7-9</sup>

### Priority nursing interventions

Interventions begin with a health history interview, lifestyle evaluation, and a head-to-toe physical assessment correlated with the patient's signs and symptoms. The priority patient-centered goals for nursing interventions are to (1) Manage signs

and symptoms; (2) Promote nutrition and healthy lifestyle habits; (3) Educate about the harmful effects of EAC; (4) Encourage engagement with a mental health or addiction-related counselor, peer-support specialist, or a recovery coach; and (5) Engage with online or local community peer support groups. Outcomes of interventions focus on preventing injury and harm to the patient and environment, supporting lifestyle changes, and improving quality of life.

### Focused assessment

The nurse may use two standardized tools, The Alcohol Use Disorder Test (AUDIT) and CAGE, during the health history interview to measure the extent of alcohol consumption.<sup>29,30</sup> Assessing the level of consciousness, speech articulation, and short-term and long-term memory are accomplished while screening the patient for alcohol consumption history.<sup>29,30</sup>

The AUDIT is a 10-question survey that quantifies drinking as low-risk, medium-risk, high-risk, or probable addiction to alcohol.<sup>27</sup> Selected examples of questions on the AUDIT include: (1) How often do you drink? (2) How many times in the last year have you failed to do something because of your drinking? (3) How often in the last year have you been unable to remember the night before because of your drinking? and (4) Have you or someone else been injured because of your drinking?<sup>27</sup> Eight of the 10 questions on the AUDIT require a response of 0 to 4.<sup>27</sup> For example, optional responses to “How often do you drink?” are: 0 (Never), 1 (Monthly or less), 2 (2 to 4 times per month), 3 (2 to 3 times per week), and 4 (4 or more times per week). Two of the 10 questions require a response of 0 to 2. For example, optional responses to “Have you or someone else been injured because of your drinking?” are: 0 (No), 1 (Yes, but not in the last

year), and 2 (Yes, during the last year). The range of possible scores is 0 to 40. Scores of 1 to 7 indicate low risk; 8 to 14, potentially harmful and hazardous consumption; 15 and above, strong likelihood of moderate to severe alcohol dependence and AUD.<sup>27</sup>

CAGE is a 4-question survey that may indicate problems with alcohol consumption.

- **C** = Have you thought about **C**utting down on drinking?
- **A** = Are you **A**nnoyed when people criticize your drinking?
- **G** = Have you felt **G**uilty about drinking?
- **E** = Have you ever had a drink when you get out of bed (**E**ye opener)?<sup>28</sup>

The higher the score on the CAGE, the greater likelihood that alcohol is impacting a person's quality of life.<sup>28</sup> The patient responds “No” (score of 0) or “Yes” (score of 1) to each question.<sup>30</sup> A score of 2 or more questions on the CAGE is clinically significant. Responses to the AUDIT and CAGE questionnaires may indicate problems with relationships, work, and a history of injury from accidents.<sup>27,28</sup>

### Other assessments

Assess BP, heart rate and rhythm, and heart sounds.<sup>7-9,21,31,32</sup> Assess respiratory rate, depth, rhythm, and lung sounds.<sup>7-9,31,32</sup> Cardiopulmonary abnormalities may indicate hypertension, heart failure, and pneumonia.<sup>7-9,21,31,32</sup> Assess the amplitude and quality of peripheral pulses to ensure optimal cardiac output.<sup>7-9,21,31,32</sup> Assess oxygen saturation to ensure it is at least 94%, indicating optimal gas exchange.<sup>7-9,21,31,32</sup> Assess the abdomen for distension, ascites, or pain.<sup>23,32</sup> Correlate ascites with increased BP, peripheral edema, weight gain, decreased serum albumin and protein levels, increased serum bilirubin levels, and jaundice indicating liver failure.<sup>23,32</sup> Changes

## Selected Resources for patients, families, and nurses

Resource	Focus
Alcoholics Anonymous <a href="http://www.aa.org/">www.aa.org/</a>	Peer support organization to help people with AUD achieve sobriety.
Al-Anon Family Groups <a href="https://al-anon.org/">https://al-anon.org/</a>	Support group for people who want to help a family member with AUD and learn healthy self-care strategies.
Women for Sobriety <a href="https://womensobriety.org/">https://womensobriety.org/</a>	Help women find their individual path to recovery through discovery of self. A strong focus on self-care is integral to the process.
She-Recovers <a href="https://sherecovers.org/about-the-foundation/">https://sherecovers.org/about-the-foundation/</a>	Peer support to help women achieve and maintain sobriety through a holistic-centered approach.
SMART Recovery <a href="http://www.smartrecovery.org/">www.smartrecovery.org/</a>	Peer support to help people achieve and maintain sobriety. Resources for patients, families, and friends of people with addiction.
Secular Organizations for Sobriety <a href="http://www.sossobriety.org/">www.sossobriety.org/</a>	Dedicated solely to helping individuals achieve and maintain sobriety/abstinence from alcohol and drug addiction, food addiction, and more.

in mental status and rising serum ammonia levels may indicate hepatic encephalopathy.<sup>23,27,32</sup> A reduction in red blood cells (RBCs), hemoglobin (Hgb), hematocrit (HCT), platelets (PLT), and prolonged activated partial thromboplastin time (aPTT) may indicate anemia or bleeding tendencies secondary to liver pathology.<sup>32</sup>

### Lab markers of EAC

The nurse should correlate lab biomarkers with the patient's alcohol consumption patterns and physical assessment findings. Gamma-glutamyltransferase (GGT) is a standard marker of EAC.<sup>15,16,33,34</sup> GGT may be elevated anytime an individual consumes alcohol, but the level is much higher in an individual who engages in EAC.<sup>15,16,33,34</sup> An aspartate aminotransferase (AST) to alanine aminotransferase (ALT) ratio of 2:1 is suggestive of liver injury secondary to EAC.<sup>15,16,33,34</sup> An in-

crease in carbohydrate-deficient transferrin is a specific marker of EAC and is especially useful when correlated with liver enzyme elevation.<sup>15,33,34</sup> An increased mean corpuscular volume (MCV) is a common feature in EAC.<sup>15,33,34</sup> Increased MCV, indicating macrocytosis, may occur secondary to the toxic effects of alcohol on the bone marrow and poor nutritional intake.<sup>15,33,34</sup>

### Nutritional concerns

Malnutrition is a significant repercussion of EAC and an impetus for organ dysfunction and failure.<sup>22,25,28</sup> Alcoholic beverages contain water, carbohydrates, and sugars and do not contain vitamins, minerals, or protein.<sup>22,25,28</sup> Hypoglycemia is common after EAC.<sup>6,20</sup> The patient may crave sweets.<sup>6,25,28</sup> Individuals who engage in EAC may be deficient in vitamin A, the B-vitamins, vitamin C, zinc, protein, calcium, and iron

leading to fatigue, depression, anemia, osteoporosis, decreased immune function, liver disease, and central and peripheral nervous system disorders.<sup>6,8,9,16,22,25,28</sup> The nurse and dietitian should encourage a patient to consume foods rich in thiamine, including poultry, pork, red meat, whole grain cereals, bread, bran, brown rice, dried beans, and nuts.<sup>22,25,28,29,31</sup>

Individuals with EAC may have electrolyte abnormalities because of poor nutrition, nausea, vomiting, and diarrhea, requiring hospitalization to manage signs and symptoms.<sup>7-9,22,25,28,29,31</sup>

### Patient education and resources

Individuals who consider themselves in recovery from AUD are committed to a life of alcohol abstinence and therefore do not drink. Unfortunately, relapse is common, especially in early sobriety, but most often, these people eventually return to a life of alcohol abstinence.<sup>12</sup>

Individuals must not engage in alcohol consumption if they cannot control drinking, have a family history of AUD, are pregnant, are younger than 21, or taking medications exacerbated by the consumption of alcohol.<sup>2,10</sup> School and community alcohol awareness programs are available to teach about the harmful physical and mental effects of the misuse and abuse of alcohol.<sup>1</sup> The nurse and other members of the interdisciplinary team may suspect that a patient engages in EAC through an evaluation of health history, physical assessment, and lab data (see *Patient assistance*).<sup>7-9,12,14-28,32,35-40</sup>

### Conclusions

EAC is a global health crisis that creates and exacerbates many health problems. A priority nursing goal is to educate the public and the patient about EAC's impact on body systems, organs, and relationships.

## Patient assistance

- Help the patient understand how EAC impacts every body system and organ, relationships, and social status.
- Teach the patient and community that AUD is a chronic illness affecting individuals of all socioeconomic statuses. Teaching can help to decrease the stigma associated with this chronic progressive illness.
- Encourage the patient to verbalize how EAC has impacted their life, such as by generating arguments with loved ones, forgetting conversations, causing family discord and trauma, receiving a citation for driving under the influence, having a chronic illness related to alcohol consumption, or losing a job.
- Encourage the patient to verbalize the need and desire to reduce or abstain from drinking alcohol. Ask what they have done to address their drinking challenges. Explain that addiction is a treatable medical problem, and getting help is strongly encouraged before life becomes unmanageable.
- Encourage the patient to develop reasonably attainable goals. For example, the patient may set goals to reduce the number of drinks each day and develop ways to cope with stress. Keeping a journal may be helpful.
- Encourage patients to seek interprofessional care to address comorbidities that may or may not be associated with EAC. Patients must be medically stable before initiating a rehabilitation plan to reduce or stop drinking. Patients may need help in an inpatient detoxification facility if they are experiencing alcohol withdrawal syndrome.
- Encourage individual or group counseling. 12-Step Programs are vital for recovery. These resources provide an environment of mutual trust, respect, and understanding in a self-paced process to facilitate recovery. Recovery coaches or peer support specialists are also helpful. In addition, inpatient or outpatient rehabilitation should be explored when a person is unsuccessful at stopping drinking on their own.
- Explore using naltrexone, an opioid antagonist, or acamprosate, a gamma-aminobutyric acid (GABA) agonist/glutamate antagonist, as a first-line option for mild AUD. Naltrexone blocks the release of endogenous opioids, reducing the rewarding effects of alcohol and the frequency of a relapse. Acamprosate is structurally related to the neurotransmitter GABA to help people with AUD maintain abstinence. Disulfiram (an aversive agent) is a second-line drug that blocks the oxidation of acetaldehyde, which causes nausea, vomiting, headache, and flushing when alcohol is consumed.<sup>41-43</sup>
- Teach the patient to use stress reduction strategies. Encourage them to engage in physical activities, including walking, running, riding a bike, meditation, yoga, and weightlifting. Alcohol is often used to reduce stress; however, when a person tries to live without alcohol, the stress level goes even higher. People who are in recovery learn to live with a new set of healthy coping strategies, such as mindfulness, movement, healthy eating, physical activity, self-love, focusing on an internal locus of control, communication skills, relationship-building, and understanding codependency.
- Teach the patient to avoid environments where alcohol is served.
- Teach the patient to prioritize sleep, schedule time to rest and rejuvenate themselves, and consume a balanced diet of proteins, fats, and carbohydrates with supplemental vitamins as needed. They should also maintain an ideal weight and schedule time for themselves to rejuvenate.
- Teach the patient to monitor signs and symptoms and promptly report them to the provider. For example, patients should report any changes in mental status or skin color, difficulty breathing, chest pain, unusual fatigue, or significant weight gain or loss.

As a member of the interprofessional team, it is the nurse's responsibility to assess the multiple dimensions of the patient's disease and implement strategies that help them to achieve harmony with body, mind, and spirit as they attempt to cope with chronic illness. The best outcome for individuals who engage in EAC, have been diagnosed with or are at risk for AUD, is to abstain from alcohol consumption. ■

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