NCPD 2.0 contact hours

ABSTRACT: *Eating disorders (EDs) are a severe type of mental illness that nurses in many settings may encounter. The three primary eating disorders—anorexia nervosa, bulimia nervosa, and binge eating disorder—are described here. Signs, symptoms, and treatment of eating disorders are outlined, along with the importance of nurses in early identification of EDs and developing therapeutic relationships with patients. A case study and elements of spiritual care are presented.*

KEY WORDS: *anorexia, binge eating, bulimia, eating disorder, nursing, therapeutic nurse–patient relationship*

Understanding Eating Disorders and the Nurse's Role in Diagnosis, Treatment, and Support

BY BRITT COLE

Photo Credit: Gatty Images / vgajic

The nurse's role in the treatment and recovery process should not be underestimated.

Eating disorders are considered one of the most severe types of mental illness. Characterized by persistent and severe disturbances in eating behaviors along with distressing emotions and thoughts (American Psychiatric Association [APA], 2023a), the physical and psychological symptoms of eating disorders result in high mortality rates and an estimated 3.3 million healthy years lost annually worldwide (Hart et al., 2020; van Hoeken & Hoek, 2020; Wu et al., 2020). An eating disorder (ED) diagnosis transcends cultural, racial, ethnic, socioeconomic, gender, and age boundaries (Udo & Grilo, 2018). Patients with EDs were particularly hard hit by the COVID pandemic, with a 15.3% increase in the diagnosis of eating disorders in 2021 and increased admissions for patients previously diagnosed (Lin et al., 2021; Otto et al., 2021; Taquet et al., 2021). The uncertainty, lack of structure, exposure to triggers, and isolation of the pandemic exacerbated fear, anxiety, and depression in many patients with EDs and contributed to the risk of relapse and disruption in treatment and recovery (Baenas et al., 2020; Castellini et al., 2020; Linardon et al., 2022; Rodgers et al., 2020; Termorshuizen et al., 2020). Given the increased incidence, severity, and burden of EDs, there is an urgent need to raise awareness of these disorders. Nurses play a pivotal role in identifying, referring, and caring for patients with EDs. This article provides an overview of eating disorders and discusses identification, treatment, usual care interventions, and spiritual care of patients with EDs.

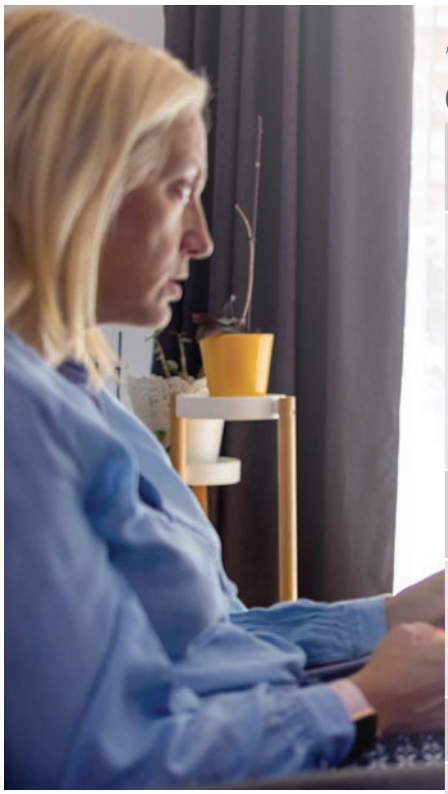
Britt Cole, MSN, RN, CPN, is an associate professor of nursing, teaching pediatrics in the BSN program at Miami University in Ohio. She has nearly 30 years of experience in pediatric nursing and is passionate about trauma-informed care of children exposed to adverse childhood events.

The author declares no conflict of interest
Accepted by peer review 9/12/2022.

* Name changed.
DOI:10.1097/CNJ.0000000000001147

OVERVIEW OF EATING DISORDERS

Seven types of eating disorders were classified in the Diagnostic and Statistical Manual of Mental Disorders ([DSM-V], APA, 2013) as shown in Table 1. The three primary types discussed here, anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED), are primarily diagnosed in adolescents and adults. The remaining four often are differentiated as "feeding disorders" based on etiology and symptoms and may be largely a medical problem. Comparing the DSM-V published in 2013 with the DSM-IV-TR (published in 2000), eating disorders were found to be more significant than previously thought (Allen et al., 2013; Quick et al., 2014). The clarifications of EDs in the DSM-V helped differentiate EDs and



Treatment for EDs is complex and involves an interdisciplinary approach.

TABLE 1.
Classifications of Eating Disorder Types per the DSM-V[a]

Anorexia nervosa (AN)	• Characterized by self-starvation and weight loss resulting in low weight for height, age, and gender. • Intense fear of gaining weight or becoming fat.
Bulimia nervosa (BN)	• Eating a large amount of food in a short time period associated with a sense of loss of control over what or how much one is eating. • Usually secretive; associated with feelings of shame or embarrassment. • Binges may be huge; food is often consumed rapidly, beyond fullness to the point of nausea and discomfort. • Regularly use compensatory behaviors to get rid of food by inducing vomiting, fasting, exercising, or laxative misuse.
Binge eating disorder (BED)	• Similar to BN; however, patients do not regularly use compensatory behaviors such as inducing vomiting, fasting, exercising, or laxative misuse.
Other specified feeding and eating disorder (OSFED)	• Includes eating disorders or disturbances of eating behavior that cause distress and impair family, social, or work function but do not fit the other categories listed. • May be determined by the duration of illness or how often behaviors are exhibited.
Avoidant/restrictive food intake disorder (ARFID)	• Disturbance in eating resulting in persistent failure to meet nutritional needs; extreme picky eating.
Pica	• Eating things that are not food or have no nutritional value. • Occurs at least 1 month.
Rumination disorder	• Repeated regurgitation and re-chewing of food after eating, whereby swallowed food is brought back up into the mouth voluntarily and is re-chewed and re-swallowed or spat out.

[a]American Psychiatric Association (2013)

allowed for more appropriate diagnosing of BN and BED. No significant changes were made regarding eating disorders in the DSM-5-TR released in 2022 (APA, 2023b).

Eating disorders are associated with significant morbidity and mortality; anorexia is considered the deadliest mental illness. Mortality rates in one large study (N = 5,839) were 5.35 per 1,639 patients for AN, 1.5 per 1,930 patients for BN, and 1.5 per 363 patients for BED (Fichter & Quadflieg, 2016). Treasure et al. (2020) reported similar mortality numbers. A seminal literature review found that anorexia has a six-fold increased rate of death, rising to 18 times the risk of death if patients are first diagnosed in their 20s (Arcelus et al., 2011). Brewerton et al. (2022) also found increased morbidity and mortality in those diagnosed with EDs at earlier ages. Suicide is a significant cause of patient mortality (Forrest et al., 2021; Mandelli et al., 2019; Taquet et al., 2021). Up to 50% of patients with an ED have accompanying comorbidities such as anxiety, depression, posttraumatic stress disorder, and obsessive-compulsive disorder (Dooley-Hash et al., 2019; Garcia et al., 2020; Mehler & Andersen, 2022). This makes treatment for EDs complex and multifaceted.

The factors contributing to the development of EDs vary. Genetics plays a role in development of EDs. For example, 50% to 80% of the risk of anorexia is considered familial (Mehler & Andersen, 2022). Other factors include popular culture views of the ideal body, weight, and beauty; history of trauma or abuse; and poor self-concept from complex relationships. Adverse childhood events and sexual trauma are risk factors for developing an ED (Brewerton et al., 2022; Castellini et al., 2020; Rienecke et al., 2022). Eating disorders are more common in women and people in their teens and 20s. Certain groups (e.g., gymnasts, runners, wrestlers) also have been found to have higher rates of EDs.

This brief overview begins to paint the picture, but what does an ED look like? Are all patients with an ED underweight? The answer is no. There can be an overlap between obesity and ED in some patients (Hornberger et al., 2021; Scholtz, 2020). And though some patients with anorexia may be physically fragile, others may have an average weight. The list of behaviors seen in EDs includes restricting food or calories, excessive exercise, forced vomiting (purging) after eating, using medications such as laxatives to rid the body of food consumed, and eating large amounts of food at one time (binging). Patients may have one or several of these behaviors.

CASE STUDY IN ANOREXIA

Emma,* a 17-year-old high school senior, is a straight-A student who has participated on a competitive cheer team since age 6. Emma's two older brothers are in the top 2% of their graduating class and excellent athletes attending college out of state. Her parents are college graduates, and her mom owns a thriving clothing boutique. Emma's struggles with body image began when she was 13. As she started to experience puberty, her rapidly changing body began to trouble her. She was developing larger breasts than her friends and a much curvier figure. Boys in her class began to tease her. Emma had several close friends on her cheer team who attended her school, but she often was involved in difficult social situations or "drama" with friends. These issues led to Emma expressing suicidal thoughts to her school counselor in eighth grade. Emma's parents sought help for Emma, and she was admitted to inpatient treatment for 6 days related to suicidal ideation.

After this inpatient admission, Emma began counseling where she was diagnosed with anxiety and depression. A year later, Emma passed out at school, hitting her head and requiring sutures. The emergency room physician noted that Emma's weight had decreased by 10% since she was seen for a stress fracture in her foot 7 months earlier. Further assessment revealed that Emma had been severely restricting her food intake and excessively exercising. Her physical exam showed mild orthostatic hypotension and mild anemia. Despite advice to have her admitted for a mental health evaluation, her parents felt confident that the situation could be handled by the therapist Emma was seeing regularly. After 3 months of outpatient therapy, Emma's ED behaviors were increasing, and her weight decreased by another 3%. Emma's relationship with her mom had become very strained as her mom attempted to support Emma emotionally. Emma was admitted as an inpatient for treatment. Over the next few years, she was admitted three more times. She currently is an inpatient in an ED treatment program, her fifth admission for anorexia.

As you read through Emma's story, can you identify risk factors for an ED? Emma's story is typical. She comes from an upper-middle class family of high achievers where the pressure to succeed may be significant. She participates in an activity that requires fitness, and where one's body is viewed in comparison to others' bodies. As puberty progresses, her body may not fit the image Emma or her peers see as ideal.

Many patients can hide an ED until physical symptoms become apparent. Patients find ways to conceal eating disorder behavior well: wearing loose clothing, eating normally in front of others, and then purging food privately or exercising excessively when alone. Additionally, healthcare providers in outpatient settings where patients with EDs may present for other problems may not have the knowledge to recognize subtle cues that could identify an ED (Johns et al., 2019; Owens et al., 2023; Salzman-Erikson & Dahlén, 2017).

When the ED is discovered, many patients are physically and psychologically ill (Mehler & Andersen, 2022; Owens et al., 2023). Initial inpatient treatment often fails, and patients are admitted multiple times for relapses at rates as high as 63%, especially during the first year after initial treatment. Long-term recovery is challenging (Andrés-Pepiñá et al., 2020; Dobrescu et al., 2020; Fichter et al., 2017; Latzer, 2019). The strain on the family in supporting a person with an ED can be significant (van Hoeken & Hoek, 2020).

TREATMENT AND NURSING CARE

Treatment for EDs is complex and involves an interdisciplinary approach. Goals for treatment focus on weight restoration for AN, normalization of eating and exercise behaviors for all EDs, and treatment of underlying mental health problems (Guarda & Attia, 2018; Hage et al., 2017). Treatment modalities include psychotherapy, medications, nutritional counseling, weight restoration monitoring, family therapy, eating and interpersonal support, and medical monitoring. After inpatient treatment, most patients will require extensive outpatient treatment and monitoring, including day hospitalization programs. Nurses intersect in the care of EDs across this spectrum of care. The nurse's role in the treatment and recovery process should not be underestimated.

Identifying EDs can be problematic in the early stages of illness when treatment may be most effective. Routine screenings for disordered eating, body image, mental health, height, weight, and body mass index (BMI) may discover early-stage EDs and improve treatment outcomes (Dooley-Hash et al., 2019; Hornberger et al., 2021; Owens et al., 2023). Patients with EDs present across healthcare settings where nurses can identify concerns by understanding physiological cues and conducting a thorough assessment and history. Although no one or two symptoms alone indicate the presence of an ED,

Patients may feel ambivalence about treatment because they view recovery as losing their identity.

TABLE 2. Physiological Changes Resulting from Eating Disorders

Body System	Changes with Eating Disorders
Vital signs	• Hypotension (notable orthostatic hypotension), bradycardia, hypothermia, arrhythmias
Neurological	• Poor concentration, slowed cognition, anxiety
Skin	• Brittle nails, thinning hair, dry or scaly skin, chapped lips, pale, cool to touch
Musculoskeletal	• Weakness, fatigue, stress fractures
Gastrointestinal	• Acid reflux, constipation, hypoactive bowel sounds, diarrhea, esophagitis
Reproductive	• Amenorrhea
Immune	• Frequent infections, especially upper respiratory infections
Dental	• Dental erosions
Laboratory	• Anemia, electrolyte imbalances, thyroid imbalance, leukopenia, vitamin and mineral deficiency, signs of dehydration
Family history and functioning	• Strained family relationships, excessive parental control, family history of eating disorders

Sources: Hovde et al. (2021) and Owens et al. (2023)

nurses can identify common assessment findings or concerning patterns (see Table 2). Nurses, as frontline providers, bring these concerns to the healthcare team and play a crucial role in referral and treatment. Additionally, nurses are providers in the long-term follow-up and support provided in primary care settings necessary for recovery (Hornberger et al., 2021; Johns et al., 2019).

Initial treatment of many patients with EDs involves medical stabilization in an inpatient setting before they can successfully engage in psychotherapy. The dual treatment of medical and psychological concerns during medical stabilization requires practitioners who demonstrate understanding, sensitivity, and knowledge regarding EDs and recognition of the multidisciplinary needs of patients (Johns et al., 2019; Owens et al., 2023; Salzman-Erikson & Dahlén, 2017). Medical stabilization often centers on nutritional restoration, avoidance of *refeeding syndrome*—a dangerous metabolic syndrome that can occur when nutrition is reintroduced after a prolonged period of malnutrition (Cioffi et al., 2021), management of electrolyte imbalance and other laboratory values, dietary planning, care of psychiatric concerns, and behavioral interventions such as staff supervision and support (Hornberger et al., 2021; Hovde et al., 2021; Owens et al., 2023).

After medical stabilization, treatment for EDs involves individualized plans requiring an interprofessional approach. Multimodal evidence-based care includes medical management and pharmacotherapy; psychotherapy; nutrition counseling; meal planning and support; and emotional, social, and personal support (Guarda & Attia, 2018; Hornberger et al., 2021; National Eating Disorders Association [NEDA], 2022). Psychotherapy treatments vary by ED type and include cognitive-behavioral therapy (CBT), family-based treatment (FBT), acceptance and commitment therapy (ACT), interpersonal psychotherapy (IPT), and dialectical behavioral therapy (DBT), (Guarda & Attia, 2018; Hornberger et al., 2021; NEDA, 2022). Adjunctive therapies such as mindfulness, art, and meditation can support patients (Owens et al., 2023). Recovery and restoration from an ED should incorporate physical, psychological, and social improvements (Corral-Liria et al., 2022; Johns et al., 2019; Latzer, 2019). Using evidence-based treatment and adherence to protocols in manualized programs improves outcomes and decreases the odds of relapse (Guarda & Attia, 2018). Nurses are key providers in these care settings and require specialized training and certification in caring for and supporting patients with EDs (Corral-Liria et al., 2022; Salzman-Erikson & Dahlén, 2017).

Therapeutic relationship-building is vital to caring for patients with EDs in any setting. Patients and their families experience barriers to care when healthcare providers take away patient control and lack sensitivity, empathy, and understanding of the complexity of EDs (Johns et al., 2019). Patients often perceive being seen as weak and unmotivated by their providers (Salzman-Erikson & Dahlén, 2017; Stavarski et al., 2019). The care of patients with EDs can be exhausting for caregivers because it requires a delicate balance of care and structure. Hage et al. (2015, 2017) demonstrated the importance of structured meals and the use of predetermined scripts in helping patients and staff overcome hurdles in treatment and the challenges of mealtimes. Additionally, the authors noted the need for staff to be able to determine when "rules" can be bent. Creating a trusting relationship of mutual collaboration, openness, honesty, and non-judgment that empowers and promotes hope is vital

to recovery and restoration (Corral-Liria et al., 2022; Owens et al., 2023; Salzmann-Erikson & Dahlén, 2017; Stavarski et al., 2019).

SPIRITUAL CARE

Spiritual care combined with traditional approaches is a significant predictor of treatment success (Grant, 2018; Richards et al., 2018). Patients with EDs struggle with guilt and shame, which can create isolation from others and disconnection from God (Grant, 2018; Richards et al., 2018). They often describe the ED as who they are and as something that has total control over their thoughts and actions (Pivarunas, 2016). Patients may feel ambivalence about treatment because they view recovery as losing their identity (Grant, 2018). Due to the recurring nature of EDs, patients struggle with feelings of hopelessness that they will never overcome the disorder (Salzman-Erikson & Dahlén, 2017; Stavarski et al., 2019).

Christian principles of hope, trust, acceptance, forgiveness, and power can help bring healing and

Therapeutic relationship-building is vital to caring for eating disorder patients.

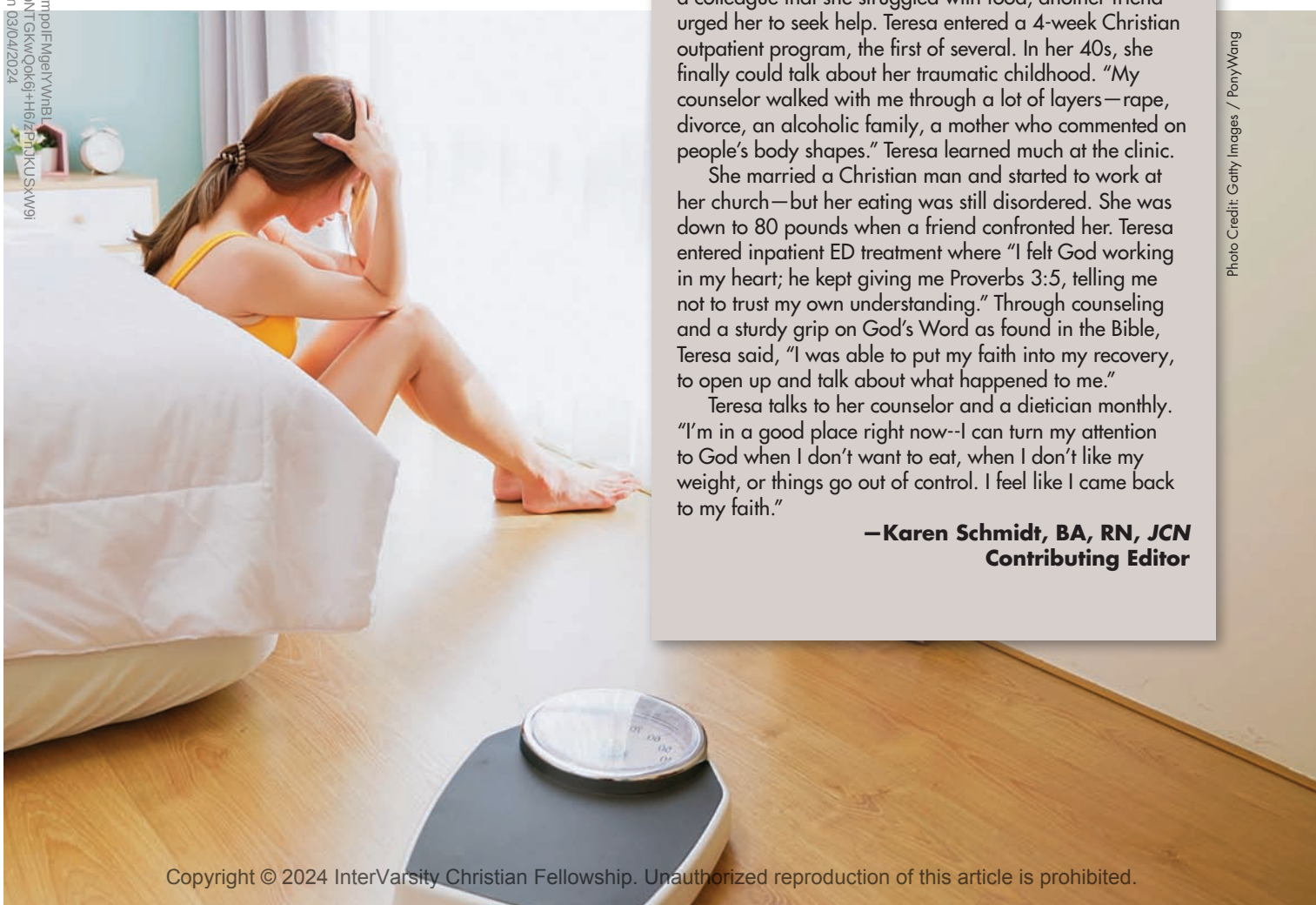


Photo Credit: Getty Images / PonyWang

SIDEBAR.

A Long Journey Toward Recovery

A chaotic childhood home life that included two parental divorces and an alcoholic, controlling stepfather is the first part of Teresa's story. She battled with inner turmoil and food for 20 years before she was diagnosed with an eating disorder (ED). That diagnosis and coming into a personal faith relationship with Jesus redirected her journey, which is still in process.

When Teresa started college, she was "very scared, a very quiet person; I didn't know how to be myself." One day in the cafeteria, without understanding why, she decided she wouldn't eat. She was a normal weight then, but eventually lost many pounds.

Back in the chaotic family home after her first college year, Teresa started binging. Despite her dream of being a teacher, she left school. "I didn't believe in myself," she said. But the ED was undiagnosed for years—years of overexercising, restricting food, and binging.

Teresa married (and later divorced) a man like her stepdad; they had two children. Teresa was clueless that she had an ED. "I thought it was my little thing. Now I see that it was about having control in my out-of-control world."

Finally, Teresa completed her degree and began teaching. In 2001, "I went to church with a friend and gave my life to Jesus Christ. However, I still struggled with eating because it was a secret." Six years later, she admitted to a colleague that she struggled with food; another friend urged her to seek help. Teresa entered a 4-week Christian outpatient program, the first of several. In her 40s, she finally could talk about her traumatic childhood. "My counselor walked with me through a lot of layers—rape, divorce, an alcoholic family, a mother who commented on people's body shapes." Teresa learned much at the clinic.

She married a Christian man and started to work at her church—but her eating was still disordered. She was down to 80 pounds when a friend confronted her. Teresa entered inpatient ED treatment where "I felt God working in my heart; he kept giving me Proverbs 3:5, telling me not to trust my own understanding." Through counseling and a sturdy grip on God's Word as found in the Bible, Teresa said, "I was able to put my faith into my recovery, to open up and talk about what happened to me."

Teresa talks to her counselor and a dietician monthly. "I'm in a good place right now--I can turn my attention to God when I don't want to eat, when I don't like my weight, or things go out of control. I feel like I came back to my faith."

—Karen Schmidt, BA, RN, *JCN* Contributing Editor

Web Resources

- **F.E.A.S.T. (Families Empowered And Supporting Treatment for Eating Disorders)** https://www.feast-ed.org
- **National Alliance for Eating Disorders** https://www.allianceforeatingdisorders.com/
- **National Eating Disorders Association** https://www.nationaleatingdisorders.org/
- **Project HEAL** https://www.theprojectheal.org/

restoration to those with EDs. Nurses can share through their presence that "The LORD is close to the brokenhearted and saves those who are crushed in spirit" (Psalm 34:18, NIV). Helping patients connect or reconnect to a higher power relieves feelings of isolation and provides hope and support (Grant, 2018; Pivarunas, 2016; Richards et al., 2018). Remind patients that God knew and valued them before they were even conceived (Jeremiah 1:5). Helping patients see themselves as God does provides a sense of identity in Christ and demonstrates acceptance. Through the healing patients can find in Christ, they can develop a new sense of purpose and meaning in life that is vital to long-term recovery (Grant, 2018; see Sidebar).

Christian nurses who pay close attention to spiritual assessment are vital in identifying patients who will benefit from spiritual care interventions. The care of patients with EDs requires a delicate balance of structure and grace. Those who follow Jesus know this as salt and light. Jesus relayed in Matthew 5:13-16 that his followers are the salt of the earth and the light of the world, saying, "Let your light shine before others, that they may see your good deeds and glorify your Father in heaven" (NIV). Nurses can act as salt by challenging patients to see the distorted thinking they have developed and providing structure in treatment that does not allow isolation and hiding. We must be light by showing grace through openness, acceptance, and compassion. The intermingling of salt and light can provide support and hope.

CONCLUSION

Nurses may provide care and support to patients with EDs across settings from identification and referral to recovery. Nurses in all settings need to understand the complex care needs of these patients. Research supports the use of thorough assessment, evidence-based care, and therapeutic nurse–patient relationships along the continuum of care for patients with eating disorders. Nurses who incorporate spiritual care help bring healing and restoration to the mind, body, and soul.

Allen, K. L., Byrne, S. M., Oddy, W. H., & Crosby, R. D. (2013). DSM-IV-TR and DSM-5 eating disorders in adolescents: Prevalence, stability, and psychosocial correlates in a population-based sample of male and female adolescents. *Journal of Abnormal Psychology, 122*(3), 720–732. https://doi.org/10.1037/a0034004

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

American Psychiatric Association. (2023a). *What are eating disorders?* https://www.psychiatry.org/patients-families/eating-disorders/what-are-eating-disorders#section_0

American Psychiatric Association. (2023b). *Updates to DSM criteria, text and ICD-10 codes.* https://www.psychiatry.org/psychiatrists/practice/dsm/updates-to-dsm

Andrés-Pepiñá, S., Plana, M. T., Flamarique, I., Romero, S., Borràs, R., Julià, L., Gárriz, M., & Castro-Fornieles, J., (2020). Long-term outcome and psychiatric comorbidity of adolescent-onset anorexia nervosa. *Clinical Child Psychology and Psychiatry, 25*(1), 33–44. https://doi.org/10.1177/1359104519827629

Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders: A meta-analysis of 36 studies. *Archives of General Psychiatry, 68*(7), 724–731. https://doi.org/10.1001/archgenpsychiatry.2011.74

Baenas, I., Caravaca-Sanz, E., Granero, R., Sánchez, I., Riesco, N., Testa, G., Vintró-Alcaraz, C., Treasure, J., Jiménez-Murcia, S., & Fernández-Aranda, F. (2020). COVID-19 and eating disorders during confinement: Analysis of factors associated with resilience and aggravation of symptoms. *European Eating Disorders Review, 28*(6), 855–863. https://doi.org/10.1002/erv.2771

Brewerton, T. D., Gavidia, I., Suro, G., & Perlman, M. M. (2022). Eating disorder onset during childhood is associated with higher trauma dose, provisional PTSD, and severity of illness in residential treatment. *European Eating Disorders Review, 30*(3), 267–277. https://doi.org/10.1002/erv.2892

Castellini, G., Cassioli, E., Rossi, E., Innocenti, M., Gironi, V., Sanfilippo, G., Felciai, F., Monteleone, A. M., & Ricca, V. (2020). The impact of COVID-19 epidemic on eating disorders: A longitudinal observation of pre versus post psychopathological features in a sample of patients with eating disorders and a group of healthy controls. *International Journal of Eating Disorders, 53*(11), 1855–1862. https://doi.org/10.1002/eat.23368

Cioffi, I., Ponzo, V., Pellegrini, M., Evangelista, A., Bioletto, F., Ciccone, G., Pasanisi, F., Ghigo, E., & Bo, S. (2021). The incidence of the refeeding syndrome. A systematic review and meta-analyses of literature. *Clinical Nutrition, 40*(6), 3688–3701. https://doi.org/10.1016/j.clnu.2021.04.023

Corral-Liria, I., Alonso-Maza, M., González-Luis, J., Fernández-Pascual, S., Becerro-de-Bengoa-Vallejo, R., & Losa-Iglesias, M. (2022). Holistic nursing care for people diagnosed with an eating disorder: A qualitative study based on patients and nursing professionals' experience. *Perspectives in Psychiatric Care, 58*(2), 840–849. https://doi.org/10.1111/ppc.12858

Dobrescu, S. R., Dinkler, L., Gillberg, C., Råstam, M., Gillberg, C., & Wentz, E. (2020). Anorexia nervosa: 30-year outcome. *British Journal of Psychiatry, 216*(2), 97–104. https://doi.org/10.1192/bjp.2019.113

Dooley-Hash, S., Adams, M., Walton, M. A., Blow, F. C., & Cunningham, R. M. (2019). The prevalence and correlates of eating disorders in adult emergency department patients. *International Journal of Eating Disorders, 52*(11), 1281–1290. https://doi.org/10.1002/eat.23140

Fichter, M. M., & Quadflieg, N. (2016). Mortality in eating disorders: Results of a large prospective clinical longitudinal study. *International Journal of Eating Disorders, 49*(4), 391–401. https://doi.org/10.1002/eat.22501

Fichter, M. M., Quadflieg, N., Crosby, R. D., & Koch, S. (2017). Long-term outcome of anorexia nervosa: Results from a large clinical longitudinal study. *International Journal of Eating Disorders, 50*(9), 1018–1030. https://doi.org/10.1002/eat.22736

Forrest, L. N., Grilo, C. M., & Udo, T. (2021). Suicide attempts among people with eating disorders and adverse childhood experiences: Results from a nationally representative sample of adults. *International Journal of Eating Disorders, 54*(3), 326–335. https://doi.org/10.1002/eat.23457

Garcia, S. C., Mikhail, M. E., Keel, P. K., Burt, S. A., Neale, M. C., Boker, S., & Klump, K. L. (2020). Increased rates of eating disorders and their symptoms in women with major depressive disorder and anxiety disorders. *International Journal of Eating Disorders, 53*(11), 1844–1854. https://doi.org/10.1002/eat.23366

Grant, C. (2018). Christian spirituality in eating disorder recovery. *Religions, 9*(2), 61. https://doi.org/10.3390/rel9020061

Guarda, A. S., & Attia, E. (2018). Evidence-based practice and the residential treatment of eating disorders: Time to raise the bar. *Clinical Psychology: Science and Practice, 25*(1), e12232. https://doi.org/10.1111/cpsp.12232

Hage, T. W., Rø, Ø., & Moen, A. (2015). "Time's up": Staff's management of mealtimes on inpatient eating disorder units. *Journal of Eating Disorders, 3*, 13. https://doi.org/10.1186/s40337-015-0052-4

Hage, T. W., Rø, Ø., & Moen, A. (2017). To bend or not to bend? Rule adherence among staff at an eating disorder unit. *Eating Disorders, 25*(2), 134–150. https://doi.org/10.1080/10640266.2016.1260361

Hart, L. M., Gordon, A. R., Sarda, V., Calzo, J. P., Sonneville, K. R., Samnaliev, M., & Austin, S. B. (2020). The association of disordered eating with health-related quality of life in U.S. young adults and effect modification by gender. *Quality of Life Research,*

29(5), 1203–1215. https://doi.org/10.1007/s11136-019-02396-2

Hornberger, L. L., Lane, M. A., & Committee on Adolescence. (2021). Identification and management of eating disorders in children and adolescents. *Pediatrics, 147*(1), e2020040279. https://doi.org/10.1542/peds.2020-040279

Hovde, K., Markovchick, T., Netzky, J., Sandberg, H., & Mehler, P. S. (2021). Care of the hospitalized patient with severe anorexia nervosa or avoidant restrictive food intake disorder. *Medsurg Nursing, 30*(3), 197–200. https://library.amsn.org/articles/1318/view

Johns, G., Taylor, B., John, A., & Tan, J. (2019). Current eating disorder healthcare services: The perspectives and experiences of individuals with eating disorders, their families and health professionals: Systematic review and thematic synthesis. *BJPsych Open, 5*(4), e59. https://doi.org/10.1192/bjo.2019.48

Latzer, Y. (2019). Stopping the "revolving door": "Zeida Laderech," a unique rehabilitation house for young adults with severe and enduring eating disorders. *Journal of Clinical Psychology, 75*(8), 1469–1481. https://doi.org/10.1002/jclp.22791

Lin, J. A., Hartman-Munick, S. M., Kells, M. R., Milliren, C. E., Slater, W. A., Woods, E. R., Forman, S. F., & Richmond, T. K. (2021). The impact of the COVID-19 pandemic on the number of adolescents/young adults seeking eating disorder-related care. *Journal of Adolescent Health, 69*(4), 660–663. https://doi.org/10.1016/j.jadohealth.2021.05.019

Linardon, J., Messer, M., Rodgers, R. F., & Fuller-Tyszkiewicz, M. (2022). A systematic scoping review of research on COVID-19 impacts on eating disorders: A critical appraisal of the evidence and recommendations for the field. *International Journal of Eating Disorders, 55*(1), 3–38. https://doi.org/10.1002/eat.23640

Mandelli, L., Arminio, A., Atti, A.-R., & De Ronchi, D. (2019). Suicide attempts in eating disorder subtypes: A meta-analysis of the literature employing DSM-IV, DSM-5, or ICD-10 diagnostic criteria. *Psychological Medicine, 49*(8), 1237–1249. https://doi.org/10.1017/S0033291718003549

Mehler, P. S., & Andersen, A. E. (2022). *Eating disorders: A guide to medical care and complications* (4th ed.). JHU Press.

National Eating Disorders Association. (2022). *Treatment*. https://www.nationaleatingdisorders.org/treatment

Otto, A. K., Jary, J. M., Sturza, J., Miller, C. A., Prohaska, N., Bravender, T., & Van Huysse, J. (2021). Medical admissions among adolescents with eating disorders during the COVID-19 pandemic. *Pediatrics, 148*(4), e2021052201. https://doi.org/10.1542/peds.2021-052201

Owens, R. A., Attia, E., Fitzpatrick, J. J., Phillips, K., & Nolan, S. (2023). Eating disorders: Identification and management in general medical and psychiatric settings. *Journal of the American Psychiatric Nurses Association, 29*(3), 241–251. https://doi.org/10.1177/1078390321999713

Pivarunas, B. (2016). A qualitative exploration of a faith-based support group for women with disordered eating. *Pastoral Psychology, 65*(2), 215–225. https://doi.org/10.1007/s11089-015-0675-z

Quick, V., Berg, K. C., Bucchianeri, M. M., & Byrd-Bredbenner, C. (2014). Identification of eating disorder pathology in college students: A comparison of DSM-IV-TR and DSM-5 diagnostic criteria. *Advances in Eating Disorders, 2*(2), 112–124. https://doi.org/10.1080/21662630.2013.869388

Richards, P. S., Caoili, C. L., Crowton, S. A., Berrett, M. E., Hardman, R. K., Jackson, R. N., & Sanders, P. W. (2018). An exploration of the role of religion and spirituality in the treatment and recovery of patients with eating disorders. *Spirituality in Clinical Practice, 5*(2), 88–103. https://doi.org/10.1037/scp0000159

Rienecke, R. D., Johnson, C., Le Grange, D., Manwaring, J. L., Mehler, P. S., Duffy, A., McClanahan, S., & Blalock, D. V. (2022). Adverse childhood experiences among adults with eating disorders: Comparison to a nationally representative sample and identification of trauma. *Journal of Eating Disorders, 10*(1), 72. https://doi.org/10.1186/s40337-022-00594-x

Rodgers, R. F., Lombardo, C., Cerolini, S., Franko, D. L., Omori, M., Fuller-Tyszkiewicz, M., Linardon, J., Courtet, P., & Guillaume, S. (2020). The impact of the COVID-19 pandemic on eating disorder risk and symptoms. *International Journal of Eating Disorders, 53*(7), 1166–1170. https://doi.org/10.1002/eat.23318

Salzmann-Erikson, M., & Dahlén, J. (2017). Nurses' establishment of health promoting relationships: A descriptive synthesis of anorexia nervosa research. *Journal of Child and Family Studies, 26*(1), 1–13. https://doi.org/10.1007/s10826-016-0534-2

Scholtz, S. (2020). Identification and treatment of eating disorders in obesity: Emotional eating. *Obesity Abstracts*. https://doi.org/10.1530/obabs.02.ou4

Stavarski, D. H., Alexander, R. K., Ortiz, S. N., & Wasser, T. (2019). Exploring nurses' and patients' perceptions of hope and hope-engendering nurse interventions in an eating disorder facility: A descriptive cross-sectional study. *Journal of Psychiatric and Mental Health Nursing, 26*(1–2), 29–38. https://doi.org/10.1111/jpm.12507

Taquet, M., Geddes, J. R., Luciano, S., & Harrison, P. J. (2021). Incidence and outcomes of eating disorders during the COVID-19 pandemic. *British Journal of Psychiatry, 220*(5), 1–3. https://doi.org/10.1192/bjp.2021.105

Termorshuizen, J. D., Watson, H. J., Thornton, L. M., Borg, S., Flatt, R. E., MacDermod, C. M., Harper, L. E., Furth, E. F., Peat, C. M., & Bulik, C. M. (2020). Early impact of COVID-19 on individuals with self-reported eating disorders: A survey of ~1,000 individuals in the United States and the Netherlands. *International Journal of Eating Disorders, 53*(11), 1780–1790. https://doi.org/10.1002/eat.23353

Treasure, J., Duarte, T. A., & Schmidt, U. (2020). Eating disorders. *The Lancet, 395*(10227), 899–911. https://doi.org/10.1016/S0140-6736(20)30059-3

Udo, T., & Grilo, C. M. (2018). Prevalence and correlates of DSM-5-defined eating disorders in a nationally representative sample of U.S. adults. *Biological Psychiatry, 84*(5), 345–354. https://doi.org/10.1016/j.biopsych.2018.03.014

van Hoeken, D., & Hoek, H. W. (2020). Review of the burden of eating disorders: Mortality, disability, costs, quality of life, and family burden. *Current Opinion in Psychiatry, 33*(6), 521–527. https://doi.org/10.1097/YCO.0000000000000641

Wu, J., Liu, J., Li, S., Ma, H., & Wang, Y. (2020). Trends in the prevalence and disability-adjusted life years of eating disorders from 1990 to 2017: Results from the Global Burden of Disease Study 2017. *Epidemiology and Psychiatric Sciences, 29*, e191. https://doi.org/10.1017/S2045796020001055

For more than 135 additional nursing continuing professional development activities related to psychosocial/psychiatric topics, go to NursingCenter.com/ce.

Lippincott® NursingCenter®

NCPD Nursing Continuing Professional Development

TEST INSTRUCTIONS

- Read the article. The test for this nursing continuing professional development (NCPD) activity is to be taken online at **www.nursingcenter.com/CE/CNJ**. Tests can no longer be mailed or faxed.
- You'll need to create an account (it's free!) and log in to access My Planner before taking online tests. Your planner will keep track of all your Lippincott Professional Development online NCPD activities for you.
- There's only one correct answer for each question. A passing score for this test is 8 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact Lippincott Professional Development: 1-800-787-8985.
- Registration deadline is June 5, 2026.

PROVIDER ACCREDITATION

Lippincott Professional Development will award 2.0 contact hours for this nursing continuing professional development activity.

Lippincott Professional Development is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 2.0 contact hours. Lippincott Professional Development is also an approved provider of continuing nursing education by the District of Columbia, Georgia, West Virginia, New Mexico, South Carolina, and Florida, CE Broker #50-1223. Your certificate is valid in all states.

Payment: The registration fee for this test is $21.95 for nonmembers, $15.95 for NCF members.