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Chapter 12

A TWELVE-STEP DAY TREATMENT PROGRAM FOR WOMEN WITH EATING DISORDERS: EXAMINING TREATMENT EFFECTIVENESS AND SPIRITUAL HEALTH BENEFITS

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ABSTRACT

Increasingly, women are entering residential and day treatment programs for eating disorders. Little is known about women who seek this type of treatment alternative. Virtually no research has evaluated the effectiveness of a 12-step approach in a day treatment program for women with eating disorders, particularly the perception of treatment effectiveness from the patient's perspective. In this chapter, we review the literature on residential and day treatment program effectiveness, emphasizing the patient's perspective of treatment experiences and satisfaction, and 12-step programs for eating disorders. We also present data from an extensive interview-based survey of patient characteristics and perceptions of treatment effectiveness and satisfaction in a day program for eating disorders using a 12-step approach in Canada.

In our analysis, we explored factors that were predictive of the success of patients in this treatment program, particularly the manner in which treatment goals were set, whether or not they were attained, whether these goals could be maintained after discharge from treatment, whether there were relapses, and the intensity of these relapses. In particular, we identified unique problems facing anorexia nervosa patients and how this treatment program enabled them to cope with and overcome relapse. There is strong evidence that this program was successful in treating a range of eating disordered women, particularly those with anorexia nervosa, with much of its success likely due to the strong social connections developed during treatment—something inherent in the 12-step model and often lacking in medically-oriented treatments.

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We believe this chapter significantly fills a gap in the literature by suggesting implications for research and practice, notably the value of using a 12-step approach in more intensive treatments. To our knowledge, this study is the first comprehensive survey of eating disordered patients who have successfully completed a 12-step day treatment program. Data were gathered concerning prior treatment experiences, problems of accessing treatment, the costs of treatment at the day program, reasons for choosing the day program, and changes in subjective well-being, notably spiritual health benefits. Rarely are such data reported in other studies evaluating eating disorder treatment. We point out a need for further research examining the clinical utility of incorporating 12-step interventions into residential and day treatment programs. We also suggest more exploration of individual differences in the application of 12-step interventions and evaluation of treatment programs. Altogether, this chapter advances our knowledge of 12-step programs in the treatment of eating disorders, specifically, the importance of spirituality, e.g., spiritual health benefits, and strong social ties for promoting recovery.

INTRODUCTION

Overview

Research on the treatment of clinical eating disorders of anorexia nervosa and bulimia nervosa rarely focuses on 12-step programs. Virtually no research to date has evaluated the effectiveness of a 12-step approach in a residential or day treatment program for women with clinical eating disorders, nor is there any indication of the type of patient who can benefit most from this approach.

We begin by providing a definition of and background information on eating disorders, followed by a review of the literature on 12-step programs for eating disorders and what is known to date about their incorporation into residential or day treatment programs. This literature also addresses the patient's perspective of treatment experiences and satisfaction and the therapeutic value of spirituality in the context of 12-step programs. In our review of 12-step programs, we will show how the concept of spirituality—a concept not fully examined in the eating disorder literature—should be integrated into our understanding of and treatment of women with eating disorders.

Finally, we will present findings from our research program evaluating a day treatment program for eating disorders based on a 12-step program, and discuss how a 12-step program can enhance both treatment and recovery processes. We hope that this chapter will advance the conceptual and empirical refinement of research, thereby contributing to more effective clinical practice. We conclude by offering recommendations for further research and practice.

EATING DISORDERS

As defined in the *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*: APA, 2013), clinical eating disorders are mental disorders characterized by extreme disturbances of eating behavior. Anorexia nervosa, bulimia nervosa and binge eating disorder are diagnostic categories of eating disorders with distinct criteria (APA, 2013; Fairburn & Harrison, 2003; for reviews, see Klein & Walsh, 2004; Williamson, Martin, & Stewart, 2004). Often eating

disorders have many features in common, with patients frequently reporting overlapping behaviors (Fairburn & Harrison, 2003; Treasure, Claudino, & Zucker, 2010). Atypical eating disorders—other feeding or eating disorder, unspecified feeding or eating disorder (*DSM-5*: APA, 2013), or eating disorder not otherwise specified (EDNOS)—also comprise a diagnostic category (*DSM-IV-TR*: APA, 2000) (Fairburn & Harrison, 2003; Rockert, Kaplan, & Olmsted, 2007).

Eating disorders are recognized as multi-dimensional, complex and chronic illnesses, with biological, psychological and sociocultural factors contributing to their development and course in different ways for different individuals (Boisvert, 2006, 2012; Boisvert & Harrell, 2009a, 2009b, 2013a, 2013b, 2013c, 2013d, 2014a, 2014b, 2015; Fairburn, Cooper, Shafran, & Wilson, 2008; Fairburn & Harrison, 2003; Klein & Walsh, 2004). Research also suggests that spirituality and/or religiosity, too, may influence the onset of eating disorder symptoms and how patients might benefit from incorporation of a spiritual focus in treatment (Boisvert, 2006; Boisvert & Harrell, 2012, 2013a, 2015, 2016). The extent to which these multi-dimensional factors interact is not well understood (Fairburn & Harrison, 2003; Klein & Walsh, 2004). Despite the complexity of eating disorders, a recurrent finding in this research is that being female is consistently identified as a "fixed risk factor" and "lived experience" of patients (Murnen & Smolak, 2015; Smolak & Murnen, 2001). Thus, Striegel-Moore and Bulik (2007) observed: "The single best predictor of risk for developing an eating disorder is being female, prompting the question *why women?*" (p. 182).

Eating disorders disproportionately affect women, with lifetime prevalence as high as 3:1 as compared to its prevalence in men (Fairburn & Harrison, 2003; Hoek, 2006; Hudson, Hiripi, Pope, & Kessler, 2007). Studies of gender differences in prevalence of eating disorder symptoms show women are significantly more affected than men, though some men also report these symptoms (e.g., Lewinsohn, Seeley, Moerk, & Striegel-Moore, 2002; Striegel-Moore et al., 2009). Other research has also documented eating disorder symptoms in men (e.g., Boisvert & Harrell, 2009b, 2009c, 2012). Lifetime prevalence estimates of anorexia nervosa, bulimia nervosa and binge eating disorder are 0.9%, 1.5% and 3.5% among women, and 0.3%, 0.5% and 2.0% among men (Hudson et al., 2007). However, higher estimates have been found in women across the eating disorder spectrum, including a 4.7% lifetime prevalence of atypical eating disorders (Favaro, Ferrara, & Santonastaso, 2003). For anorexia nervosa and bulimia nervosa, average prevalence rates of 0.3% and 1.0%, respectively, have been found for young women (Hoek, 2006).

Eating disorders are the third most common form of chronic illness among adolescent and young adult women in the United States (Gordon, 2000). Chronicity of illness often leads to relapse, recurrence and poor outcome; the unremitting nature of these disorders makes them treatment refractory (Keller, Herzog, Lavori, Bradburn, & Mahoney, 1992; Olmsted, Kaplan, & Rockert, 1994; Pike, 1998; Steinhausen, 2002; Steinhausen & Weber, 2009; Sullivan, 2001). Eating disorders, particularly anorexia nervosa, have the highest mortality rates of any psychiatric diagnosis (Arcelus, Mitchell, Wales, & Nielsen, 2011; Herzog et al., 2000; Hoek, 2006; Sullivan, 1995).

Eating disorders, recognized as a substantial disease burden (Agras, 2001; Hay & Mond, 2005), are linked to substantial psychological, social and physiological disturbances, and medical complications (Klein & Walsh, 2004; Rome & Ammerman, 2003; Williamson et al., 2004; Zipfel, Löwe, & Herzog, 2003). Eating disorders are also associated with significant financial, economic and community stresses that adversely impact overall health, well-being

and quality of life (Abbate-Daga et al., 2014; Hay, 2003; Latner, Vallance, & Buckett, 2008; Mond, Owen, Hay, Rodgers, & Beumont, 2005; Padierna, Quintana, Arostegui, Gonzalez, & Horcajo, 2000; for reviews, see Engel, Adair, Las Hayas, & Abraham, 2009; Hay & Mond, 2005; Jenkins, Hoste, Meyer, & Blissett, 2011; Sy, Ponton, De Marco, Pi, & IsHak, 2013).

Anorexia Nervosa, Bulimia Nervosa and Binge Eating Disorder

Anorexia nervosa (AN) is characterized by an extreme fear of weight gain (APA, 2013). Lifetime prevalence rates range from 1.9% to 4.3% (Hoek, 2006; Hoek & van Hoeken, 2003; Keski-Rahkonen et al., 2007; Smink, van Hoeken, & Hoek, 2012). Methods used to avoid or prevent weight gain can include starvation, excessive exercising and purging, such as vomiting or laxative abuse (Peñas-Lledó, Vaz Leal, & Waller, 2002; Turner, Batik, Palmer, Forbes, & McDermott, 2000). Medical complications can include amenorrhea, lethargy, bradycardia, peripheral edema, impaired renal function, cardiovascular problems, and osteoperosis (Athey, 2003; Mitchell & Crow, 2006; for review, see Katzman, 2005). Complications are typically fatal, with a substantial risk of death from starvation or suicide (Herzog et al., 2000; Hoek, 2006). Patient's receptivity to treatment is frequently poor, and many of them seek treatment only when emaciated to the point of death (Abbate-Daga, Amianto, Delsedime, De-Bacco, & Fassino, 2013). Women with anorexia nervosa, especially those with binge-purge behavior, longer illness history and lower body mass index (BMI), tend to fail to engage in or drop-out of treatment prematurely, possibly out of a sense of hopelessness about existing treatment models (Abbate-Daga et al., 2015; Howard, Evans, Quintero-Howard, Bowers, & Andersen, 1999; Löwe et al., 2001; for reviews, see Fassino, Pierò, Tomba, & Abbate-Daga, 2009; Mahon, 2000).

Bulimia nervosa (BN) also involves preoccupation with food and is characterized by binge eating followed by purging, excessive exercise or fasting (APA, 2013). Lifetime prevalence rates range from 0.9% to 2.9% (Hoek & van Hoeken, 2003; Smink et al., 2012). Medical complications can include loss of dental enamel, cardiac and skeletal myopathies, amenorrhea, and electrolyte imbalances (Lasater & Mehler, 2001; Mehler, 2011; Mitchell & Crow, 2006). Fatal medical complications can occur in the form of esophageal tears, gastric rupture and cardiac arrhythmias (Lasater & Mehler, 2001; Mehler, 2011; Mitchell & Crow, 2006). Women with bulimia nervosa report considerable disability, impairment, distress, and co-occurring illnesses compared to women without bulimia nervosa (Johnson, Spitzer, & Williams, 2001). Women with bulimia nervosa who report a longer illness history and higher levels of laxative abuse, depressed mood and anger, and dissatisfaction with their body weight, typically fail to engage in treatment or drop-out prematurely (Agras et al., 2000; Coker, Vize, Wade, & Cooper, 1993; Fassino, Abbate-Daga, Pierò, Leombruni, & Rovera, 2003; for reviews, see Bell, 2001; Fassino et al., 2009; Mahon, 2000).

Binge eating disorder (BED) is characterized by recurrent binge eating in the absence of extreme weight control methods, e.g., purging that characterizes bulimia nervosa (APA, 2013; for review, see Amianto, Ottone, Abbate-Daga, & Fassino, 2015). Binge eating behavior is defined as eating unusually large amounts of food in discrete periods of time while experiencing a subjective sense of loss of control (APA, 2013). Prevalence is estimated to 3.3%, but tends to be higher in community subsamples of older women and obese women (Johnson et al., 2001; Kinzl, Traweger, Trefalt, Mangweth, & Biebl, 1999; for review, see Streigel-Moore & Franko, 2003). Physical and psychiatric co-morbidities are linked to binge eating disorder (Wilfley, Wilson, & Agras, 2003; for review, see de Zwaan, 2001). For

example, repeated episodes of binge eating over time may increase obesity (Hudson et al., 2007), and, in turn, morbidity and mortality due to excess weight (Allison, Fontaine, Manson, Stevens, & VanItallie, 1999; Flegal, Williamson, Pamuk, & Rosenberg, 2004). Patients with binge eating disorder report higher levels of disability, medical problems, anxiety and mood disorders, and psychosocial stress compared to women without binge eating disorder (Fassino, Leombruni, Pierò, Abbate-Daga, & Rovera, 2003; Johnson et al., 2001; Wilfley et al., 2003). Binge eating disorder represents a public health problem on par with bulimia nervosa, with low treatment rates (Kessler et al., 2013) and high drop-out rates, depending on the treatment approach (for review, see Wonderlich, de Zwaan, Mitchell, Peterson, & Crow, 2003). Women with binge eating disorder reporting earlier onset and higher initial binge eating, dietary restraint and overeating, and negative affectivity have higher relapse and poorer treatment response (Agras et al., 1995; Agras, Telch, Arnow, Eldredge, & Marnell, 1997; Peterson et al., 2000; Safer, Lively, Telch, & Agras, 2002; Stice et al., 2001).

Patient Characteristics

Women who should seek specialty treatment (but typically do not) are those with greater duration, frequency, intensity and severity of symptoms, co-morbid medical and psychiatric conditions, and a history of poor treatment response (Howard et al., 1999; Twohig, Bluett, Torgesen, Lensegrav-Benson, & Quakenbush-Roberts, 2015).

Noordenbos, Jacobs, and Hertzberger (1998) conducted a qualitative study of treatment history and course in a subsample of chronic eating disorder patients, i.e., patients with a $\geq$10-year duration of illness (n = 98). Content analysis of letters written by these chronic patients showed they reported more negative experiences with traditional treatment, especially behavior therapy, hospital admission and tube feeding, and less faith in further treatments than patients with shorter duration of illness.

In a subsequent quantitative study, Noordenbos, Oldenhave, Muschter, and Terpstra (2002) examined characteristics and treatment experiences in a sample of women with chronic eating disorders, i.e., patients with a $\geq$10-year duration of illness (N = 41). Descriptive statistics showed most women in their sample developed anorexia nervosa (44%). A mean age of eating disorder onset was 18 years (range 7-45 years). Mean age at the time of the study was 34 years (range 25-53 years), with a mean duration of illness of 15 years (range 9-36 years). Noordenbos et al. (2002) observed that eating disorders can be "…found in women of all weights, from heavyweights to featherweights" (p. 18). Only 35% of participants reported receiving treatment at specialized treatment facilities for eating disorders, while 44% attended a self-help group. Most participants reported their treatment was not effective at all, only partially effective or effective for only a short time. Most therapies were evaluated in a negative way, especially behavioral therapy which was regarded as a "treatment intended only to fatten and to punish" (p. 23). In the Noordenbos et al. (2002) study, participants reported that because many treatments that they were subjected to were not experienced as effective, or only partially effective, many of them (42%) reported turning, instead, to alternative therapies, e.g., acupuncture. Some patients also reported that repeated failures and relapses led to lost hope for improvement.

Twohig et al. (2015) examined patient characteristics, pathology and functioning in women at a residential treatment facility. A sample of adolescent girls (n = 143) and adult women (n = 116) completed at intake an extensive demographic and clinical assessment. The majority of adult patients entering treatment were diagnosed with anorexia nervosa, followed

by eating disorder not otherwise specified (EDNOS) and bulimia nervosa. The average age was 24 years (*SD* = 6.86), and the average BMI was 19.79 (*SD* = 4.81), with patients with anorexia nervosa having significantly lower BMI compared to other eating disorder subgroups. The majority of patients were White, single, North American residents, and had attended some college or graduated college. Patients reported severe levels of depression, moderate levels of anxiety and were in the typical clinical range with respect to eating disorder severity. Patients reported lower quality of life and general functioning.

The limited number of studies on patient characteristics seeking treatment in residential and day treatment eating disorder facilities highlights a need for this information. (For existing data, see Abbate-Daga et al., 2012, 2015; Bean & Weltzin, 2001; Berner, Shaw, Witt, & Lowe, 2013; Button & Warren, 2001; Delinsky et al., 2010; Forman & Davis, 2005; Lowe, Davis, Annunziato, & Lucks, 2003; Lowe, Witt, & Grossman, 2013; Twohig et al., 2015; Willinge, Touyz, & Thornton, 2010; Zeeck, Hartmann, & Kuhn, 2005.)

Eating Disorder Residential and Day Treatment Programs

The management of eating disorders is very expensive, requiring a very high level of professional treatment and care and the highest level of service hierarchy (i.e., intensive outpatient treatment, day treatment, residential treatment, or inpatient hospitalization) (Grave, Ricca, & Todesco, 2001). Treatment interventions for patients with eating disorders have typically been offered on an outpatient or inpatient basis, but in recent decades this has shifted with the rise of residential and day treatment programs (Birchall, Palmer, Waine, Gadsby & Gatward, 2002; Frisch, Herzog, & Franko, 2006; Lammers, Exterkate, & De Jong, 2007; Willinge et al., 2010; Zipfel et al., 2002). A variety of multi-disciplinary, group-treatment focused residential and day treatment programs have been developed as part of a larger model or continuum of care for eating disorder patients in different countries and healthcare settings (e.g., Kaye, Kaplan, & Zucker, 1996; Robinson, 1993, 2003; Willinge et al., 2010; for reviews, see Abbate-Daga et al., 2009; Frisch et al., 2006; Lammers et al., 2007; Zipfel et al., 2002). These programs, which are subject to ongoing structural and treatment model changes in response to managed care forces and patient needs, vary in terms of breadth and intensity of treatment and size. Wthin the stepped-care framework, they facilitate a step-down transition from inpatient care or step-up transition from outpatient care.

Day treatment programs were originally designed for cost-containment, involving biological, psychological and social interventions aligned with therapeutic goals of medical stabilization and the normalization of eating and related behaviors. These day treatment programs have sought to improve health status along with psychological and social functioning (Kaye et al., 1996; Piran, Langdon, Kaplan, & Garfinkel, 1989; Piran, Kaplan, et al., 1989). Residential treatment programs were similarly established to provide cost-effective 24-hour/7-day-a-week intensive and comprehensive services such as individual, group and family therapy as well as medical and nutritional stabilization. Residential treatment is an intensive modality, entailing biological, psychological and social interventions and preventing physical deterioration or death (Frisch et al., 2006). Residential and day treatment programs are equipped to address dual-diagnoses. Women with eating disorders often have co-morbid substance use disorders (Blinder, Cumella, & Sanathara, 2006; Walfish, Stenmark, Sarco, Shealy, & Krone, 1992; for review, see Holderness, Brooks-Gunn, & Warren, 1994). Another

clinical advantage is that day treatment programs allow patients to maintain their autonomy since they are less controlled and monitored (Kaplan & Olmsted, 1997). They also enhance social networks and contacts (Zipfel et al., 2002), and provide a setting in which patients can practice applying newly acquired skills. Such is not the case with inpatient treatment settings (Zeeck et al., 2009; Zeeck, Herzog, & Hartmann, 2004; Zipfel et al., 2002). Residential and day treatment programs have the advantage of a long-term, structured and intensive treatment locale outside the sterile environment of a hospital setting. They are generally cheaper than inpatient treatment (Piran, Kaplan, et al., 1989; Striegel-Moore, Leslie, Petrill, Garvin, & Rosenheck, 2000). The average cost per day ($956) recently reported for residential treatment versus the cost of one day ($2000) in inpatient treatment indicates that residential treatment is a more cost-effective option for both short- and long-term care (Frisch et al., 2006). Whereas the average weekly costs of inpatient treatment can total $3722.00, the average cost of a day treatment program is estimated at $804.00 (Kaplan & Olmsted, 1997). Day treatment reduces costs by one-third compared to inpatient programs (Howard et al., 1999), with costs as low as $9645.00 per patient and treatment (Williamson, Thaw, & Varnando-Sullivan, 2001).

Treatment Effectiveness

Much of the literature on residential and day treatment programs offers a summary of the programs, but it reports no detailed supporting documentation or empirical data (e.g., Gerlinghoff, Gross, & Backmund, 2003; Johnson & Sansone, 1993; Johnson & Taylor, 1996; Richards, Hardman, & Berrett, 2007; Stewart & Williamson, 2004a, 2004b; Thornton, Beumont, Touyz, 2002; Touyz, Thornton, Rieger, George, & Beumont, 2003). While residential and day treatment options for women with eating disorders have become more available in the last few decades due to their clinical and cost advantages, very few studies actually examine program effectiveness and outcomes (for reviews, see Abbate-Daga et al., 2009; Frisch et al., 2006; Hepburn & Wilson, 2014; Lammers et al., 2007; Zipfel et al., 2002).

Zipfel et al. (2002) conducted a systematic literature search that was limited to three day treatment programs. Both similarities (e.g., use of a multi-disciplinary staff, reliance on group treatment as the primary means of therapy), and marked differences (e.g., inclusion criteria, intensity of care) were found.

Lammers et al. (2007), in an attempt to compare their treatment program with others, conducted a systematic literature search that was limited to seven day treatment programs. There were similarities between all of the programs (e.g., inclusion criteria, intended outcome, specific treatment interventions). However, many important differences also existed (e.g., treatment duration, intensity of treatment, theoretical orientation, goals of treatment, and weight gain regime). Lammers et al. (2007) indicated that these marked differences made it hard to compare outcome data.

Frisch et al. (2006) surveyed 19 residential treatment programs. All of the programs offered treatment for anorexia nervosa and bulimia nervosa, with 72% also treating EDNOS, 61% treating binge eating, 44% treating compulsive exercising, and 22% treating obesity. Women were accepted at all of the facilities, with 16 of the 19 facilities admitting only adults or adults and adolescents. Average patient age was 22 years (SD = 3.7). Average length of stay (LOS) was 83 days (SD = 44). Average cost per day was $956 ($SD$ = $250, range $550-$1,500). Therefore, an average LOS in these residential programs cost approximately $79,438. Facilities reported primarily using traditional treatment orientations of cognitive-behavior therapy (CBT) and dialectical-behavior therapy (DBT). For every 10 hours of

traditional therapy that patients received, 5.9 hours of nontraditional therapies (e.g., arts, dance, yoga, music, equine) was received. For every 10 hours of group therapy that patients received, 1.8 hours of individual therapy was received.

Abbate-Daga et al. (2009) conducted a literature review of 11 day treatments for eating disorders to examine similarities, differences and treatment goals across programs, including their own program. The main similarities were as follows: A biopsychosocial model served as a frame of reference. A CBT model was the basis for treatment, with behavioral contracts being featured. Other objectives included weight normalization/weight gain, and eating behavior modification/normalization. Family involvement was often integrated into the treatment procedure, with attention given to body image modification. The main differences were a lack of inclusion criteria, treatment duration, approach to eating and compensatory behaviors ranged from control to autonomy, psychometric assessment, and varying degrees of post-discharge follow-up. Psychological and behavioral objectives also differed. The review suggested the existence of two different day treatment models. The first has a shorter duration program which is mainly symptom-focused. The second is more individual-focused, of longer duration, with an emphasis on patient's relational skills, psychodynamic understanding of symptoms, and gradual changes in body weight.

Hepburn and Wilson (2014) conducted a systematic review of pre- and post-outcomes from 15 studies assessing the effectiveness of day treatment programs for adults with eating disorders. Findings revealed mainly large and medium effect sizes. Large effect sizes included increases in BMI for patients with anorexia nervosa and reduction in symptoms, and a decrease in depression. Medium effect sizes were changes in self-esteem and reduction in anxiety. Medium to large effect sizes were also found for eating disorder attitude change. One exception was for perfectionism which showed only a small effect size.

Turning from literature reviews to individual studies, the research evaluating the effectiveness of residential treatment in samples of eating disordered adults mostly reports good short- and long-term outcomes (Bean et al., 2008; Bean & Weltzin, 2001; Brewerton & Costin, 2011a, 2011b; Delinksy et al., 2010; Gleaves, Post, Eberenz, & Davis, 1993; Lowe et al., 2003; Wooley, Wooley, & Deddens, 1993). A handful of studies evaluating day treatment programs for eating disordered adults suggest they are effective in terms of short-term outcomes (Abbate-Daga et al., 2015; Becker-Stoll & Gerlinghoff, 2004; Ben-Porath, Wisniewski, & Warren, 2010; Dancyger et al., 2003; Fittig, Jacobi, Backmund, Gerlinghoff, & Wittchen, 2008; Gerlinghoff, Backmund, & Franzen, 1998; Kong, 2005; Maddocks, Kaplan, Woodside, Langdon, & Piran, 1992; Olmsted, Kaplan, & Rockert, 2003; Olmsted, McFarlane, Trottier, & Rockert, 2013; Piran, Langdon, et al., 1989; Thornton et al., 2002; Willinge et al., 2010; Zeeck et al., 2004, 2005). These studies indicate that day treatment is effective for those with moderate to severe eating disorder symptoms when the treatment includes a CBT orientation emphasizing behavioral change and group support, food intake monitoring and meal supervision (Abbate-Daga et al., 2009; Becker-Stoll & Gerlinghoff, 2004; Kong, 2005; Lammers et al., 2007; Manara, Manara, & Todisco, 2005; Zeeck et al., 2004). Some studies indicate that post-discharge, patients who are encouraged to participate in self-help groups tend to maintain good outcomes (e.g., Fittig et al., 2008; Gerlinghoff et al., 1998).

Comparisons across day treatment programs where eating disorder patients are treated in homogeneous groups have shown many similarities, e.g., CBT orientation, but also important differences in terms of treatment goals and outcomes (Gerlinghoff et al., 1998; Levitt &

Sansone, 2003; Peake, Limbert, & Whitehead, 2005; Piran, Langdon, et al., 1989; Stewart & Williamson, 2004a, 2004b; Thornton et al., 2002; Touyz et al, 2003; for reviews, see Abbate-Daga et al., 2009; Lammers et al., 2007).

This literature has tended to evaluate effectiveness of residential or day treatment programs in terms of changes in measures of eating disorder symptom severity or other psychopathology rather than from the changes reflecting the patient's subjective perspective. Assessing changes from the patient's viewpoint is vital, however, in order to design and tailor treatment programs to maximize their needs, prevent relapse and promote recovery after discharge. Data on residential or day treatment programs from the patient's perspective are, unfortunately, scarce.

Patient's Perspective of Treatment Experience, Evaluation and Satisfaction

During the last 25 years, the evaluation of treatment of eating disorders from the patient's perspective has been reported in only a handful of studies. Studies of eating disorder patients' treatment expectations found that discrepancies in expectations between patients and therapists can explain treatment drop-out (Clinton, 1996, 2001).

Rosenvinge and Klusmeier (2000) argued: "A consumer's point of view is perhaps particularly relevant to eating disorders, where treatment may be imposed upon patients with grave symptoms which the patient may be reluctant to correct. Also, there may be a general skepticism about the patient's ability to know what is best for her and an illusion that negative treatment experiences may be ignored as superficial due to the symptom denial and failure to recognize the need for treatment. Furthermore, there may be a disparity between 'objective' measures of treatment effects, for instance symptom reduction and the patient's subjective satisfaction with this reduction. Study of patient satisfaction may importantly supplement efficacy studies to improve the quality of health care services" (pp. 293-294).

Newton, Hartley, and Sturmey (1993) examined subjective treatment evaluation for patients with eating disorders. A sample of eating disordered women (n = 52) and men (n = 1), attending an eating disorder support group, read a vignette describing a woman receiving treatment for anorexia nervosa and then completed a measure of treatment acceptability. Results indicated that patient group discussions of problems were uniformly rated as more acceptable than two alternative behavioral treatments. These behavioral treatments, in turn, were rated as more acceptable than pharmacological treatment.

Newton, Robinson, and Hartley (1993) examined treatment experiences among patients with eating disorders. They conducted a mail-out survey of eating disordered women (n = 1644) and men (n = 39) in the United Kingdom that was comprised of four sections: (a) demographic data, (b) help-seeking behavior, (c) treatments received, and (d) current status in terms of coping with eating problems. Respondents reported a delay of 5 years between onset of their eating disorder and treatment. Respondents reported that counseling services and self-help groups, particularly meeting with other people with eating disorders, were very helpful. Some respondents (n = 452) reported favorably attending self-groups organized by Overeaters Anonymous (OA), hospital staff, eating disorder sufferers or ex-sufferers. In contrast, these respondents reported that general practitioners, nurses and dieticians were not very helpful to them. The majority of respondents reported they coped fairly well with eating problems, but identified a need for access to specialist services.

Rosenvinge and Klusmeier (2000) replicated Newton, Robinson et al.'s (1993) study, focusing on self-reported patient satisfaction with treatment, factors relating to treatment

satisfaction, and patient suggestions for improving the quality of specialist services. A sample of women (N = 321) who were members of Norwegian organizations for eating disorder patients completed a mail-out survey. Respondents reported a delay of 5-6 years between onset and treatment seeking. Most were in outpatient treatments, and they articulated a need for greater access to specialist services. A majority of respondents (n = 179) reported attending self-help groups, rating them as extremely helpful. Respondents who perceived therapists were knowledgeable and understanding about eating disorders reported higher treatment satisfaction.

A small number of studies have examined evaluation and/or satisfaction of treatment received at specialized services/facilities. Swain-Campbell, Surgenor, and Snell (2001) examined patterns of consumer satisfaction following contact with a specialist eating disorders service. In their study, a sample of women with eating disorders (N = 120) completed a mailed survey administered two years post-discharge from inpatient treatment. Respondents overwhelmingly reported high overall rates of satisfaction with multiple aspects of their eating disorder treatment. Respondents reported their highest satisfaction with respectful treatment by staff, and lowest satisfaction with the adequacy of explanations of treatment by staff. Respondents most often reported the therapeutic alliance as an important aspect of treatment, namely, aspects of bonding, trust, collaboration, and shared commitment. Respondents reported disliking traditional treatments, e.g., being weighed, and perceived pressure to change and try new behaviors that they felt ill-equipped to manage. Respondents reported the need for more support groups and more lenient rules on weight gain.

Clinton (2001) examined treatment experiences in a sample of eating disordered women (n = 456) and men (n = 5) who had been followed-up six months after treatment in various multi-site specialist centers (outpatient, residential, day treatment) in Sweden. A principal components factor analysis was performed with varimax rotation, identifying two large orthogonal factors accounting for 36.8% of the variance in self-report items. These two factors focused on treatment expectations and experiences of support, respectively. Step-wise multiple regression analyses performed on a subgroup (n = 252) who had completed an 18-month follow-up showed a significant relationship between experiences of support and treatment satisfaction. Experiences of support alone predicted 22% of the variance in treatment satisfaction.

Button and Warren (2001) examined the treatment experience of women with anorexia nervosa. These women (N = 36) were followed up 7.5 years later. Data on characteristics of this initial cohort were collected along with experiential data on eating disorder and treatment experiences. Most participants reported mixed feelings about the helpfulness of treatment services, identifying poor attitude of staff and overemphasis on weighing as the least helpful. Most participants perceived that individual therapy was very helpful (52%), but fewer reported the same for self-help organizations (15%).

In a subsequent study, Clinton, Björck, Sohlberg, and Norring (2004) explored treatment satisfaction among eating disordered women (n = 462) and men (n = 7) who has been surveyed 36 months after initial assessment at multi-site specialist centers in Sweden. Satisfaction was measured using a questionnaire that focused on the patient's initial reception to the treatment center, suitability of treatment, ability of staff to listen and understand, confidence in the center, and treatment goals. After 36 months, 38% of patients were highly satisfied with treatment, while 39% were merely satisfied and 23% were unsatisfied. Degree of satisfaction was best predicted by treatment interventions that focused on treatment support

and increased control of eating problems. Dissatisfied patients were characterized by significantly higher levels of eating disorder pathology and psychiatric symptomatology and more negative interpersonal profiles. Dissatisfied patients were less prepared to change their eating behaviors, had higher levels of conflict with their fathers, had a lesser degree of present weight acceptance, and tended to expect less benefit from treatment interventions that focused on controlling eating problems. Clinton et al. (2004) concluded that clinicians may be more successful in engaging and satisfying patients in treatment strategies that focus on support and control of eating problems, but they might be less successful with those patients who have more interpersonal problems and are less focused on eating disorder symptoms.

De la Rie, Noordenbos, Donker, and van Furth (2006) also investigated the treatment of eating disorders from the patient's perspective. A sample of women (N = 304) with current eating disorders (n = 156) as well as former eating disorders (n = 148) completed a mailed survey. Many respondents (22%) did not seek treatment until 5 years after onset. Treatment in specialized eating disorder centers was rated as most helpful followed by self-help groups and dieticians. The most beneficial components of treatment at specialized centers included professional knowledge displayed by staff, greater understanding of eating disorder symptoms and underlying issues, and support received from other eating disorder patients. Respondents reported as unhelpful strict rules governing treatment, rivalry among patients, and too much focus on eating disorder pathology rather than underlying psychological issues. In reflecting on their findings, De la Rie et al. (2006) suggested that involving patients in self-help groups might facilitate treatment.

Nowoweiski, Arthey, and Bosanac (2011) evaluated a pilot day treatment program in an Australian mental health setting which used an integrative approach combining traditional treatments such as DBT and intensive, short-term dynamic therapy, with nutritional interventions in a group-based setting. A sample of women with eating disorders (N = 6) attended the program two days/week over four consecutive weeks and completed standardized measures of eating disorder pathology and comorbid symptomatology. Analysis of pre- and post-treatment changes indicated a significant reduction in depressive symptoms and a slight decrease in eating disorder pathology, along with a high degree of satisfaction with the treatment. Group psychotherapy was ranked as the most helpful component, in part, because it offered an opportunity for support from other eating disordered women. Meal support was ranked the least helpful component, in part because of insufficient support related to food challenges/triggers.

Eating Disorders and Twelve-Step Programs

Self-help groups are typically used as an adjunct to residential or day treatment or as part of discharge aftercare (Grave et al., 2001; Wilson, Vitousek, & Loeb, 2000; also see von Ranson & Farstad, 2014). The sparse research on a 12-step approach to treat eating disorders has dealt largely with self-help programs such as Overeaters Anonymous (OA) and Anorexics and Bulimics Anonymous (ABA) (Russell-Mayhew, von Ranson, & Masson, 2010; von Ranson, Russell-Mayhew, & Masson, 2011; also see von Ranson & Farstad, 2014). Generally speaking, in the 12-step model, reference is made to a "God," a "Higher Power," along with "spiritual experience" and "spiritual awakening" (AA World Services, 1955; Galanter, 2007). Twelve-step programs have been described as "a spiritual program for living" as "there is no

dogma, theology, or creed to be learned" (Miller & Kurtz, 1994, p. 165), and defined as spiritually-based fellowships with a major source of their strength being members' "Higher Power" (Chappel & DuPont, 1999). According to Miller (1998): "These steps are worked not just once as an act of salvation, but rather as an ongoing lifelong program for living. Sobriety is similarly understood in a spiritual context, involving far more than being abstinent…[it is] having to do with a spiritual maturity that involves acceptance, humility and serenity" (p. 981). The text, *Alcoholics Anonymous* (AA) (the "Big Book": AA World Services, 1939), conceptualizes the AA program while its companion text, *Twelve Steps and Twelve Traditions* (AA World Services, 1952) elaborates on the 12-step philosophy and the spiritually-grounded ethos of mutual support as a health benefit. Twelve-step groups provide accessible group support while addressing individuals' needs for identity, integrity and an inner life within a spiritual context (Peteet, 1993). Twelve-step groups are truly one of the few places in contemporary life where people can be "real" in honestly sharing their weaknesses, failings, character defects, imperfections, and hence, humanness (Khantzian & Mack, 1994; Kurtz & Ketchum, 1992).

As a "spiritual recovery movement," 12-step programs engage its followers in behavioral expectations associated with their health issues (Galanter, 2007). These programs are based on powerful group processes that interrupt and modify core problems in self-regulation (Khantzian & Mack, 1994). "Working the steps" is designed to promote a "spiritual awakening" that prepares the recovering individual to carry the message to others and to practice the principles of the fellowship in all daily affairs, e.g., demonstrating how embracing a power higher than one's self, i.e., a Higher Power, can foster recovery that is experienced as a "spiritual journey that leads to sustained abstinence" (Green, Fullilove, & Fullilove, 1998, p. 325).

Spirituality—a theme common in 12-step programs—is often conceptualized as encompassing existential beliefs such as the search for meaning and purpose in life and transcendence (Miller & Thoresen, 2003), with some viewing spirituality as a transcendent relationship with what is considered sacred in life (Walsh, 2000). More specifically, spirituality reflects meaningful relationship with a transcendent power, e.g., God or Higher Power, a sense of purpose and meaning in life, and a sense of closeness and connectedness to the sacred such as nature or others (Miller & Thoresen, 2003; Walsh, 2000). Spirituality can be defined as "the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred" (Hill et al., 2000, p. 66; Hill & Pargament, 2003; Pargament, 2001; Pargament, Mahoney, Exline, Jones, & Shafranske, 2013). Here, sacred refers to "a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual" (Hill et al., 2000, p. 66; Hill & Pargament, 2003; Pargament, 2001). Spirituality is a personal concept that stimulates a sense of intimacy and evokes feelings that include awe and wonder (Walsh, 2000). Various dimensions of spiritual wellness have been identified, including: the absolute or divine; meaning; connectedness; mystery; the sense of freedom; experience—ritual—practice; forgiveness; hope; knowledge-learning; and present-centeredness (Ingersoll, 1998).

Overeaters Anonymous

Overeaters Anonymous (OA) was developed in 1960, with the text, *Twelve Steps of Overeaters Anonymous*, published in 1990 in an attempt to adapt the 12-step philosophy to eating disorders (OA, 1990, 1993). It is a 12-step self-help program for compulsive overeaters, with binge eating regarded as a physical, emotional and spiritual disorder (OA,

1990, 1993). OA proposes recovery through the adoption of a lifestyle that leads to overall well-being. The first step of OA begins with the admission of powerlessness over food; the next eleven steps are designed to help members achieve "physical, emotional and spiritual healing" (OA, 1990). The only requirement for membership is the desire to stop eating compulsively (OA, 1990). OA members report a range of dysfunctional eating patterns and difficulties with food (Russell-Mayhew et al., 2010; von Ranson et al., 2011).

The goal of OA is abstinence from food, although the definition of abstinence may be different for each member (Russell-Mayhew et al., 2010). It may involve abstinence from particular foods, i.e., white flour, sugar, or abstinence from overeating or binge eating. Given the impossibility of abstaining entirely from food, OA encourages the use of a food plan in addition to the 12-steps to help members achieve recovery. OA does not outline the food plan that should be adopted—this is left up to individual members. OA members often adopt a highly structured food plan when they join OA and eventually move on to a more flexible plan as their recovery progresses (Wasson & Jackson, 2004). OA members report that their focus often shifts from weight loss toward spiritual growth and psychological health over time, though success in OA is typically measured by weight loss (Russell-Mayhew et al., 2010).

The spirituality component of OA has been identified as helpful. Hertz, Addad, and Ronel (2012) conducted a qualitative phenomenological study that focused on the emotional recovery of OA members. Semi-structured in-depth interviews were used to obtain personal narratives from women (N = 20) who participated in OA for a year. Thematic analyses revealed that the tools used for spiritual and emotional work at OA were essential to recovery. Hertz et al. (2012) observed: "After experiencing reinforcing relationships with other recoverees and sponsors, OA women achieve a basic sense of security. Their secure experience with human beings is reinforced by their faith in God's unconditional love of the universe" (Hertz et al., 2012, p. 117).

Ronel and Libman (2003) conducted a qualitative phenomenological study on the experience of compulsive overeating and recovery among OA members. Interviews were undertaken with Israeli women (n = 80) and men (n = 8) who had participated in OA for a few months to several years. Results showed "a world-view transformation" in four domains: (a) experience of self, (b) Universal Order/God, (c) relationships with others, and (d) perception of the problem. Ronel and Libman (2003) proposed that the spiritual foundation of OA and other spiritually-oriented approaches may be adapted to the clinical setting for eating disorders, but do not specify which settings or type of spiritual foci might be most appropriate.

Anorexics and Bulimics Anonymous

Anorexics and Bulimics Anonymous (ABA) was founded in 1993, with a text or guidebook, *Anorexics and Bulimics Anonymous*, published in 2002 that applies the 12-step philosophy to anorexia nervosa and bulimia nervosa (ABA, 2002). Akin to OA, this program also welcomes anyone suffering from other disordered eating behaviors such as compulsive overeating, binge eating and excessive exercise. The only requirement for membership is a desire to stop unhealthy eating (ABA, 2002). Unlike OA, which defines the problem as centered on food, ABA defines the problem as being dysfunctional practices that allow members to feel in control of food, weight and body shape (ABA, 2002). ABA members are encouraged to obtain "meal support" in early recovery, which involves an ABA sponsor

and/or outside professional (e.g., dietician, nutritionist) planning, preparing and serving all meals and snacks to the other member until they are "no longer afraid of getting fat" (ABA, 2002). In ABA, recovery is defined as surrendering to the way that one's Higher Power wants them to eat and accepting the body that one's Higher Power wants them to have (ABA, 2002). In this way, the program is focused on body acceptance. To our knowledge, there is no known research on the effectiveness of ABA.

Twelve-Step Programs in Eating Disorder Treatment Settings

There is virtually no research on the use of a 12-step approach in residential or day treatment for eating disorders, or evaluation of its effectiveness in promoting recovery. This absence of research motivated us to explore the benefits of incorporating a 12-step approach, with its corresponding emphasis on spirituality, into eating disorder treatment settings. This exploration resulted in our evaluation of a 12-step day treatment program for eating disorders, which we discuss later on in this chapter.

Only two anecdotal descriptions of incorporating a 12-step approach in residential and day treatment settings exist, both suggesting it is has clinical utility that merits further consideration. Johnson and Sansone (1993) and Johnson and Taylor (1996) reported their experience with integrating a 12-step component into a long-term psychodynamically-oriented residential treatment program. The 12-step component involved patients spending approximately one hour per day on 12-step-oriented material such as step studies, meditations and reading the *Alcoholics Anonymous* (AA) text aka the "Big Book," *The Twelve Steps and Twelve Traditions* and other AA-related texts. Twelve-step groups led by recovering counselors closed with a serenity prayer, a 12-step tradition. Patients were also encouraged to attend 12-step meetings in the community. Some of the advantages of the 12-step component described by Johnson and Sansone (1993) and Johnson and Taylor (1996) include engendering hope and faith (e.g., "Do what I have done and you will get better"), and offering structure, a common language, and a support network.

Richards et al. (2007) reported on their experience of including a 12-step group in multi-modal inpatient and residential treatment programs for eating disorders. Patients in their programs attended a weekly one hour 12-step group led by a psychotherapist who encouraged "a personal, spiritual journey toward recovery" by getting "in touch with their spirituality" and opening up to the "experience of how God acts in the group, their own life, and their peers' lives" (Richards et al., 2007, p. 190). Richards et al. (2007) concluded that there are many potential benefits of using a 12-step group in inpatient and residential treatments and these may extend to outpatient treatment, too.

Richards et al. (2007) concluded: "First and foremost, a 12-step group provides a tried and tested method for including spirituality in treatment. The 12-step approach is ecumenical and thus allows patients from diverse religious and spiritual backgrounds to come together in an accepting atmosphere where they can support each other in their spiritual exploration and growth. The 12-step approach also offers a number of other potential benefits, including (a) instillation of hope and faith for recovery, (b) giving women a common language for discussing spirituality, (c) providing a concrete action plan for using one's faith in recovery, and (d) offering a support network that can help prevent relapse, particularly after professional treatment has ended…" (p. 203).

Taking it a step further, Richards, Berrett, Hardman, and Eggett (2006) examined the potential benefits of spirituality and effectiveness of using spirituality-oriented approaches in

residential treatment for eating disorders. Richards et al. (2006) compared the effectiveness of a spiritually-oriented approach with cognitive and emotional approaches among eating disordered women (N = 122) receiving residential treatment. Results showed that at the conclusion of treatment, patients in the spirituality support group reported significantly fewer eating disorder symptoms and psychological disturbance and greater spiritual well-being compared to patients in the other groups. Richards et al. (2006) concluded: "…[A]ttending to eating disorder patients' spiritual growth and well-being during inpatient treatment may help reduce depression and anxiety, relationship distress, social role conflict, and eating disorder symptoms" (p. 401).

New Research on a Twelve-Step Day Treatment Program for Women with Eating Disorders

In this section of our chapter, we report findings from research that evaluates the effectiveness of a day treatment program for eating disorders—its predominant use of a 12-step model, which emphasizes spirituality—in a clinical sample of Canadian women (N = 22). Since relatively few women seek treatment at specialized facilities it is essential that we increase our knowledge of patient characteristics and perspectives of treatment effectiveness and satisfaction. Moreover, it is critical that we gain insight and understanding of the clinical utility of incorporating a 12-step approach and spiritual strategies into specialized facilities, as there is virtually no published data. Accordingly, the present study was designed to fill a gap in the literature. An understanding of the use of a 12-step approach and its spiritual component can help professionals in their efforts to treat effectively eating disorders and promote recovery processes. Implications for practice and research are discussed, contributing to the dialogue on treatment options for eating disorders.

This study differed from previous research by: (1) examining patient characteristics in the context of a day treatment program for eating disorders using a 12-step approach, (2) examining the patient's perspective on this treatment model, notably effectiveness and satisfaction, and (3) examining spirituality, e.g., spiritual health benefits, of this treatment model.

METHOD

Treatment Setting

The women in this study received treatment for an eating disorder at the Society for the Assisted Cooperative Recovery from Eating Disorders (SACRED), a non-profit treatment program located in Alberta, Canada. Initially, SACRED was a residential treatment program with an intimate, four-bed homelike environment. SACRED eventually transitioned into a day treatment program housed in a community facility that operated year-round, 7 days-a-week, and provided meal support from breakfast to dinner.

SACRED's 12-step philosophy and protocols were drawn from the text, *Anorexics and Bulimics Anonymous* (ABA, 2002), along with the *Alcoholics Anonymous* (AA) text aka "Big Book" and *The Twelve Steps and Twelve Traditions* (AA World Services, 1952, 1955). It was believed that the use of a 12-step model could benefit women by reducing their eating

disorder symptomatology and the "insanity" of their "disease" through mutually supportive helping relationships and trust in a Higher Power that could foster their willingness to surrender their control over food. It was also believed that the 12-steps could promote self-discovery, enhance self-esteem and self-empowerment, foster a sense of autonomy alongside connectivity, and assist in developing a healthy, balanced lifestyle and quality of life.

Meal support was a core component of the program, with patients eating together to encourage one another to let go of their control vis-à-vis food and instead surrender to it. This hallmark feature of SACRED was aligned with the ABA framework (ABA, 2002). A unique, key component of SACRED's Day Program was the use of recovered staff on the treatment team—staff that had recovered via a 12-step program, e.g., ABA, AA. It was believed that having recovered staff working in a residential/day treatment program also eating the same food and sitting with patients helped them to develop behavioral patterns leading to recovery. In addition to exposure to and hands-on experiences with food to simulate real life, it was believed that eating meals with recovered staff enabled patients to observe role modeling of healthy eating and to surrender control over eating. This unique therapeutic practice, i.e., using staff members who had "done it themselves and recovered from the 12-steps" and thus, could draw on personal experience to help eating disordered women through the ABA 12-step program, has not been previously reported in the literature. Recovered staff members, referred to as "primary workers," were expected to self-disclose of their experience of 12-step recovery and in this way, serve as role models of recovery. Some primary workers were also social workers who possessed the therapeutic skills necessary to lead various therapies (e.g., individual, group, family/couples), and facilitate patients' therapeutic processes.

Patients were admitted to SACRED following referrals from sources such as medical professionals, hospitals and community self-help groups, e.g., 12-step groups. SACRED treated women diagnosed with anorexia nervosa, bulimia nervosa, binge eating disorder (i.e., compulsive overeating), as well as atypical eating disorders. Eligibility for admission required that patients passed a physical exam by a physician as well as an intake with the program manager. Admission was a collaborative process between the admitting patient and treatment team members. The duration of each woman's stay varied based on her personal circumstances and treatment needs. Patients were admitted under the understanding that they were treated to outcome, meaning that patients were discharged following consensus of the treatment team.

The treatment offered was long-term and primarily based on an ABA 12-step model, while incorporating multi-disciplinary components. Patients attended daily group therapy that was process-oriented, addressing issues related to the eating disorder experience. Patients attended ABA 12-step groups in the program as well as 12-step groups, e.g., AA, in the community. Accordingly, they were expected to have an ABA-sponsor inside the program, but could also have a 12-step sponsor or contact with other 12-step group members, e.g., AA, outside the program for additional "guidance and support." Approximately once a week patients received individual therapy from a therapist, e.g., social worker, and met one-on-one with a primary worker, as needed, for assistance and support. The program was designed as a transition back into real life with patients acquiring daily living responsibilities, especially taking more responsibility for their food and physical, mental, social, and spiritual health. As patients progressed and were closer to discharge, they participated in family/couples therapy, worked with an onsite cook and received nutritional education from a dietician to address their individualized nutritional needs. Patients met weekly with a physician for weigh-ins,

medical evaluation and medication monitoring. A psychiatrist and a dietician served as ongoing consultants, with a nurse who also complimented the multi-disciplinary program. Patients participated in weekly recreational activities such as yoga or group walks. Other key experiential exercises included therapeutic exposures to the community such as eating at a restaurant as a step towards reintegration Patients also participated in educational activities such as guest lectures by a member of another 12-step program, e.g., AA, and group literature studies involving reading the *Alcoholics Anonymous* (AA) text aka the "Big Book," and discussing its application to their lives.

Patients participated in aftercare following discharge to prevent relapse by continuing to "work the steps" and maintaining strong connections developed in the program. At the time of data collection, SACRED's Day Program was still operating. As a non-profit, SACRED opened its doors in 1998 with the assistance from external funding sources. Unfortunately, due to an insufficient amount of funds, SACRED was forced to close its doors near the end of 2010.

Since SACRED is unconventional in its treatment of eating disorders in a residential/day treatment program context, we believe that it is important to evaluate the program from the patient's perspective. We concur with Thornton et al. (2002) who, in describing their nontraditional day treatment program, advised: "The outcome measures used in a program must reflect the philosophy and goals of the program" (p. 8). Accordingly, we analyze and present outcome variables that are reflective of the SACRED program's 12-step philosophy and goals.

This study received approval by the University of Alberta's institutional review board (IRB). All of the participants provided informed consent to participate in the study. They also gave consent to having their responses to the telephone survey audio-recorded as a check on the accuracy and reliability of the data. Archival file data, consisting of extensive demographic and clinical assessment variables, were also used to supplement patient self-reports. Self-report survey data were obtained through in-depth interviews conducted via telephone by an interviewer (first author) trained in quantitative and qualitative methodology, including telephone surveys and program evaluation. The survey consisted of closed- and open-ended questions, permitting a rich understanding of the patient's personal experience and evaluation of SACRED's Day Program. To enhance accuracy and reduce error, during the telephone survey the interviewer inputted respondent's responses to the closed-ended questions and transcribed verbatim respondent's responses to the open-ended questions. Both closed- and open-ended questions tapped experiential and program evaluation information. For the purpose of this study, only respondent's responses to the closed-ended questions were analyzed.

The demographics collected for this study included: height, actual weight, aspired to or ideal weight, body mass index (BMI; a weight to height ratio [wt/ht2]: Garrow & Webster, 1985), current age, age of first eating disorder diagnosis, education, occupation, marital status, ethnicity, and eating disorder diagnosis. (Diagnosis had been determined by the physician at time of intake).

A total of 22 respondents who had completed SACRED's Day Program were interviewed out of 33 who were contacted for this study. (Data for 2 pre-test respondents have not been included.) Telephone survey interviews had a mean duration of 70 minutes (range: 45 to 90 minutes). Three respondents were not interviewed because they were attending SACRED's Day Recovery Program at the time of data collection. One respondent declined to participate

in the study. Seven respondents were not interviewed because of out-of-service telephone numbers, or because they could not be reached after multiple callbacks.

RESULTS

Demographic Characteristics

Who Were the Respondents?

A majority of the respondents (n = 13; 59%) reported being single (n = 13) at the beginning of treatment, and this status remained the same for 68.2% (n = 15) of them following discharge. Before admission to SACRED, 90% (n = 20) had completed some university or more post-secondary education. The majority of the respondents reported an income level of less than $25,000 per year before admission to SACRED (n = 15; 68.2%). This level of income tended to remain the same during the year following discharge. Ninety percent (n = 18) reported their race/ethnicity as White. Ten percent reported their race/ethnicity as Aboriginal or East Indian. Most of the respondents did not report any current addictions (n = 16), and those who did most frequently reported alcohol (n = 3), over-exercising (n = 3) and workaholism, i.e., over-working (n = 3). The mean age of respondents was 37.61years (SD = 15.51), with a range of 22 to 74 years. Mean BMI was 27.22 (SD = 13.13) with a range from 16 to 58. The difference between a respondent's actual weight and "ideal" or desired weight was calculated by taking the arithmetic difference between the two values. The mean of this weight discrepancy was 34.97 pounds (SD = 41.66), with a range from -3.20 pounds (i.e., the ideal weight for one respondent was 3.2 pounds greater than her actual weight) to a maximum of 137.0 pounds. Mean age of onset of a diagnosed eating disorder was 29.74 years (SD = 14.90), and, on average, respondents had experienced an eating disorder for 7.87 years (SD = 5.38).

What Eating Disorders Did Respondents Have before Admission to SACRED?

The majority (n = 19; 90.5%) of the respondents reported a diagnosis of anorexia nervosa before admission to SACRED. A third (n = 7) reported a diagnosis of bulimia nervosa, and 28.6% (n = 6) a diagnosis of eating disorder not otherwise specified (EDNOS).

Who Diagnosed Respondents' Eating Disorders?

All of the respondents reported receiving a diagnosis from a physician. Smaller percentages were diagnosed by a psychiatrist (n = 6; 27.3%), a psychologist (n = 5; 22.7%), or a dietician (n = 6; 27.3%).

Who Treated Respondents before Admission to SACRED?

Respondents were most likely to report being treated by a physician (n = 15; 68.2%) before admission to SACRED. Thirty-six percent (n = 8) saw a psychologist, 36.4% (n = 8) a dietician, and 31.8% (n = 7) a psychiatrist.

Where Were Respondents Treated before Admission to SACRED?

Fourteen of the 22 respondents reported being treated in various settings for their eating disorder before admission to SACRED. All of these respondents reported receiving treatment from a physician in private practice. Thirty-six (n = 5) reported receiving treatment from a hospital, 21.4% (n = 3) a community clinic, and 21.4% (n = 3) a school counseling service.

Who Referred Respondents to SACRED?

More than 90% (n = 20) of the respondents reported that the SACRED physician referred them to SACRED, i.e., the physician who was affiliated with SACRED but also had an outside private practice. Thirty-two percent (n = 7) reported that a family member referred them to SACRED, 9.1% (n = 2) a friend or other SACRED participant, and 27.3% (n = 6) had self-referred.

Accessibility and Admission to SACRED

How Long Did Respondents Have to Wait before Admission to SACRED?

Exactly half (n = 11) of the respondents reported waiting 2-3 weeks. A smaller group (n = 4) reported waiting 7-12 weeks to gain admission to SACRED. The majority of the respondents (n = 14) reported waiting 3 weeks or less to gain admission to SACRED. None reported more than 6 months.

How Long Did This Wait Time Compare to That for Other Treatment Programs?

Only 9 of the 22 respondents reported that they had received treatment before admission to SACRED and, thereby, had a basis of comparison. All but 1 of these 9 respondents reported that the wait time to gain admission to SACRED was about the same or less as that of other treatment programs. Only 1 respondent reported a longer wait time to gain admission to SACRED.

Did Respondents Encounter a Barrier(s) to Accessing SACRED?

The majority (n = 15; 68.2%) of the respondents reported encountering a barrier(s) to accessing SACRED.

Reasons for Participating in SACRED

Respondents were asked to list the reasons for participating in SACRED's Day Program. The most frequently selected category (n = 14; 66.7%) was that they had heard the staff was supportive and understanding. This was followed closely by SACRED's excellent reputation ("I had heard good things about it"), reported by 6.19% (n = 13). More than half (n = 12; 57.1%) thought they could be successfully treated at SACRED, as did an equal number who believed that SACRED would give them time to recover. The least selected category was cost ("It was cheaper than other programs"), reported by only 14.3% (n = 3). Thirty-three percent (n = 7) reported that they had tried other treatment programs that had failed.

Living Costs Associated with SACRED

Respondents were asked about living costs; six questions dealt with the issue of whether or not these costs were a barrier to participating in SACRED. Forty-eight percent of the respondents (n = 10) reported that they lived at home with family while enrolled in SACRED. The next most frequently reported residence was at SACRED (n = 5; 23.8%). Nineteen percent (n = 4) rented an apartment, and 14.3% (n = 3) found someone to share a place with. Following discharge, 40.9% (n = 9) reported that they had not changed their place of residency, and 45.5% (n = 10) lived at home with their family. The majority of the respondents (n = 12; 57.1%) reported that their living costs were paid by their family. Forty-eight percent (n = 10) reported that they used their savings. Thirty-eight percent (n = 8) reported that either insurance or government assistance paid for living costs. More than 77% (n = 17) reported that living costs during their participation in SACRED were either "manageable," "low," or "very low." Only 23% reported these costs were "expensive" or "very expensive." Twenty-eight percent of the respondents (n = 6) reported that based on their income level at the time they found SACRED to be "affordable" or "very affordable." Forty-three percent (n = 9) found that SACRED was either "not affordable" or "very unaffordable."

Treatment Costs Associated with SACRED

Respondents were asked questions about the financial costs of treatment at SACRED. Of those respondents (n = 12) who had participated in other treatment programs, exactly one third (n = 4) regarded SACRED as "much more expensive," and one third regarded SACRED as "much lower" in cost. The majority of the respondents (n = 14; 70.0%) reported that their family paid for treatment costs, and 40% (n = 8) reported that they used their savings. Only 15% (n = 3) reported that insurance or government assistance paid for treatment costs. The source of funds for treatment matches sources used for living costs: family or savings. Far fewer respondents reported that insurance or government assistance covered treatment costs than was the case for living costs.

Reasons for Discharge from SACRED

All but four of the respondents (n = 18; 90.0%) reported that they were discharged from SACRED because they had successfully completed the program. Only a few of the respondents reported that they were discharged from SACRED because of a lack of funds (n = 3; 13.6%), because of a belief that treatment was not working (n = 3; 13.6%), because of disciplinary problems (n = 2; 9.1%), or because they decided to do so despite this being against medical advice (n = 2; 9.1%).

Treatment Success of SACRED

Fifty-five percent (n = 12) of the respondents reported that at the time of discharge they had achieved all or most of their treatment goals. Forty-four percent (n = 10) reported achieving a few or none of their treatment goals at the time of discharge. In terms of post-discharge, 50% (n = 11) reported continuing to achieve all or most of their treatment goals. Fifty percent (n = 11) reported continuing to achieve a few of their treatment goals.

Life Today without Treatment at SACRED

Respondents were asked to consider where they would be today had they not received treatment from SACRED. Eighty-two percent (n = 18) reported that they would be worse off in terms of physical health, 81.8% (n = 18) reported that they would be worse off psychologically, and 77.3% (n = 17) reported that they would be worse off in terms of their spiritual well-being. Sixty-eight percent (n = 15) reported that they would likely be dead.

Health and Well-Being after Treatment at SACRED

Respondents were asked a series of questions that required them to rate their subjective well-being after receiving treatment at SACRED. More than 90% (n = 20) reported that they were "better" or "much better" in terms of their social well-being. Eight-six percent (n = 19) reported that they were "better" or "much better" in terms of their spiritual well-being. Seventy-seven percent (n = 17) reported that they were "better" or "much better" in terms of their physical health. Seventy-three percent (n = 16) reported that they were "better" or "much better" in terms of their psychological health. However, 72% (n = 16) reported that their financial "health" was the same, "worse," or "much worse."

Skills Learned at SACRED

Eighty-two percent of the respondents (n = 16) reported that they agreed or strongly agreed with the belief that they were happier and healthier overall because they had learned to take care of themselves. Seventy-two percent (n = 16) reported that they agreed or strongly agreed that they had learned at SACRED to take better care of themselves spiritually. Seventy-six percent (n = 16) reported that they agreed or strongly agreed that they had learned how to take care of themselves psychologically. Eighty-two percent (n = 18) reported that they agreed or strongly agreed that they had learned how to take care of themselves socially. Seventy-three percent (n = 16) reported that they agreed or strongly agreed that they had learned how to take care of themselves physically. Seventy-seven percent (n = 17) reported that they agreed or strongly agreed that they had learned to live and cope with life without their eating disorder.

Respondents were also asked to list the skills that they had learned while at SACRED. Interestingly, more than 77% of the respondents reported successfully learning a wide range

of skills such as eating three meals a day, prayer and meditation, taking responsibility for their lives, attending 12-step self-help group meetings, and taking care of themselves.

Treatment Effectiveness of SACRED and Program Improvements

Ninety-six percent (n = 19) reported that they agreed or strongly agreed with the sentiment that SACRED's Day Program was helpful in treating their eating disorder. For those who had been in treatment programs prior to SACRED, more than half reported the belief that SACRED was "better" or "much better" than treatment programs previously attended. Only 1 respondent reported the belief that SACRED was worse than treatment programs previously attended.

Respondents were also asked to indicate how SACRED's Day Program might be improved. More than 90% (n = 20) indicated the need for government funding. Sixty-eight percent (n = 15) indicated a need for more after-care or recovery follow-up. Seventy-seven (n = 17) indicated a need for more staff, and 54.5% (n = 12) a need for more beds.

Post-Discharge Contact with SACRED

How many respondents contacted SACRED? Fully 82% (n = 18) reported contacting SACRED following discharge. Twenty-eight percent (n = 5) reported contacting SACRED on a weekly basis or more often following discharge; however, most (n = 13; 72.2%) reported "periodic" contact, when needed.

How Soon Did Respondents Contact SACRED?

Forty-seven percent (n = 9) reported contacting SACRED within a few days following discharge, with the majority (n = 16; 79%) contacting SACRED in three weeks or less. The most recent contact with SACRED was equally split between 2-3 weeks (n = 4; 21.1%), 4-6 months (n = 4; 21.1%) or more than 2 years (n = 4; 21.1%). There is no discernable pattern to these "recent" contacts, though most discharged individuals contact SACRED within 3 weeks following discharge.

How Often Did Respondents Contact SACRED?

Thirty-two percent of the respondents (n = 7) report contacting SACRED post-discharge 1-10 times, and 27.3% (n = 6) reported more than 50 times. Only 13.6% (n = 3) reported that they never contacted SACRED following discharge. The typical contact with SACRED lasted 15 minutes or less (n = 11; 57.9%).

How Did Respondents Contact SACRED?

For those respondents who reported contacting SACRED following discharge, all of them telephoned in. Seventy-four percent (n =14) reported that they continued to see the SACRED physician. Sixty-eight percent (n = 13) reported that they went in person to SACRED.

Whom Did Respondents Contact at SACRED?

When respondents contacted SACRED, more than 78% (*n* = 15) of these contacts involved the SACRED physician, 68.4% (*n* = 13) a program coordinator, and 84.2% a program counselor. The dietician (*n* = 6; 31.6%) and cook (*n* = 7; 36.8%) were contacted relatively less frequently.

Why Did Respondents Contact SACRED?

Respondents listed the reasons why they contacted SACRED following discharge. All of the respondents who reported contacting SACRED reported that they did so to gain support or stay connected. Eighty-four percent (*n* = 16) reported that they contacted SACRED to stay on track with recovery/sobriety.

Post-Discharge Contact with Other Professionals

Respondents were asked a series of questions to gauge the extent to which they visited health care professionals following discharge from SACRED. The majority of respondents reported seeing physicians for treatment for their eating disorder less often (*n* = 15; 68.2%) following discharge from SACRED. Of those who saw a psychiatrist, almost half (*n* = 7 out of 13) reported seeing the psychiatrist less often following discharge from SACRED. Interestingly, for those who saw a dietician, equal numbers (*n* = 7) reported seeing one "more often" or "less often" following discharge from SACRED. The majority of the respondents had not seen a psychologist (*n* =12; 54.5%), a nurse (*n* = 16; 72.7%), an alternative practitioner (*n* = 17; 81%), or been admitted to hospital (*n* = 16; 72.7%) following discharge from SACRED.

Relapses and Recovery after SACRED

Respondents were asked whether or not they had experienced a relapse(s) following discharge from SACRED. Sixty-four percent (*n* = 14) reported that they had relapsed. Of those who reported a relapse(s), 42.9% (*n* = 6) had relapsed more than 20 times. Twenty-nine percent (*n* = 4) reported relapsing only 1-2 times. When relapses occurred, they tended to last less than a week (*n* = 3; 21.4%). The most recent relapse tended to be within the last day (*n* = 5; 35.7%) or within 7-12 months (*n* = 4; 28.6%). For those who did relapse, they were most likely to seek support from the SACRED physician (*n* = 10; 76.9%), family members (*n* = 9; 69.2%), 12-step group meetings (*n* = 9; 69.2%), or friends (*n* = 10; 76.9%).

Respondents were asked to indicate how they were making recovery/sobriety a daily priority. The vast majority of the respondents reported that they worked the 12-steps (*n* = 17; 81%), had a sponsor (*n* = 17; 81%), engaged in prayer or meditation (*n* = 20; 95.2%), and abstained from eating disorder behavior (*n* = 17; 81%).

Respondents were asked to indicate how recovery and sobriety had changed their life following discharge from SACRED. The majority of the respondents reported improvement in a wide range of skills, relationships and sense of well-being. Notable exceptions were an ability to prevent or prepare for relapse, reported by only 54.5% (*n* = 12) and the ability to get back on track after a relapse (*n* = 12; 54.5%).

Summary of Closed-Ended Survey Responses

Demographic Characteristics

Fifty-nine percent of the respondents report being single versus married. Most had some post-secondary education. The majority of the respondents reported an income level of than $25,000 per year before and after admission to SACRED. Ninety percent (*n* =18) reported their race/ethnicity as White. Ten percent reported their race/ethnicity as Aboriginal or East Indian. Ninety-one percent reported a diagnosis of anorexia nervosa and having been treated by a physician before admission to SACRED. The mean age of respondents was 37.61years (*SD* = 15.51), with a range of 22 to 74 years. Mean BMI was 27.22 (*SD* = 13.13) with a range from 16 to 58.

Barriers to Accessing SACRED

The majority of the respondents (*n* = 14) reported a wait of 3 weeks or less. Only 9 of the 22 respondents indicated that they had received treatment from another program before admission to SACRED. Of those who had been previously treated in another program, all but 1 of these 9 stated that the wait time for SACRED was about the same or less. Only 1 respondent reported a longer wait time. Fully 68.2% (*n* = 15) of the respondents reported that there were barriers to accessing SACRED.

Living and Treatment Costs Associated with SACRED

Forty-eight percent of the respondents reported that they lived at home with family while at SACRED. Most reported paying less than $1,100 per month for living costs. The majority of the respondents reported that their living costs were paid by their family or from savings. More than 77% reported that living costs during their participation in SACRED were either "manageable," "low," or "very low." Of those respondents who had participated in other treatment programs before admission to SACRED, exactly one third (*n* = 4) believed that SACRED was "much more expensive," and one third believed that SACRED was "much lower" in cost.

Reasons for Participating in SACRED

The most frequently reported reason for participating in SACRED was that respondents had heard that the staff was supportive and understanding. This was followed closely by SACRED's reputation ("I had heard good things about it").

Reasons for Discharge from SACRED

All but four of the respondents reported that they were discharged because they had successfully completed the program. Only a few of the respondents reported that they were discharged because of a lack of funds, a belief that treatment was not working, disciplinary problems, or their opting for discharge against medical advice.

Treatment Success of SACRED

A majority of the respondents reported that at the time of discharge they had achieved all or most of their treatment goals. "But for" their participation in SACRED's Day Program, 82% reported that they would be worse off in terms of physical health, 81.8% reported that

they would be worse off psychologically, and 77.3% reported that they would be worse off in terms of spiritual well-being. Sixty-eight percent reported that they would likely be dead had they not received treatment from SACRED. After completing the SACRED Day Program, most believed that they were "better" or "much better" in terms of social well-being, spiritual well-being, physical health, and psychological health. The majority of the respondents reported improvement in a wide range of skills, relationships and sense of well-being. Notable exceptions were an inability to prevent or prepare for relapse, reported by 54.5%, and an inability to get back on track after a relapse.

Skills Learned at SACRED

Most respondents reported that they agreed that they were happier and healthier overall because they had learned to take care of themselves; that they had learned at SACRED to take better care of themselves spiritually, psychologically, socially, physically, and that they had learned to live and cope with life without their eating disorder. Most respondents reported successfully learning a wide range of skills such as eating three meals a day, prayer and meditation, taking responsibility for their lives, attending 12-step self-help group meetings, and taking care of themselves. The "skills" reported by less than 60% of the respondents are revealing: "having serenity," "exercising in moderation," "shopping for groceries," "planning and preparing meals," "setting realistic goals," "preventing relapse," and "getting back on track after a relapse."

Post-Discharge Contact with SACRED

Fully 82% had contacted SACRED following discharge. The majority of the respondents contacted SACRED within 3 weeks following discharge, most of which contacted SACRED in three weeks or less. Thirty-two percent contacted SACRED post-discharge 1-10 times, and 27.3% more than 50 times. Only 13.6% never contacted SACRED following discharge. The typical contact with SACRED occurred by telephone and lasted 15 minutes or less. All of the respondents made contact to gain support, stay connected, or to stay on track with regard to recovery/sobriety.

Post-Discharge Treatment and Relapse

The majority of the respondents reported seeing a physician for treatment of their eating disorder less often following discharge from SACRED. Sixty-four percent reported having a relapse(s) following discharge from SACRED. Of those who relapsed, 42.9% had relapsed more than 20 times. When relapses occurred, they tended to last less than a week. For those who relapsed, they were most likely to seek support from the SACRED physician, family members, 12-step group meetings, or friends.

Correlations between Variables

Table 1 shows Pearson bivariate correlations between demographic variables collected during the intake interviews and our survey measures of treatment effectiveness. The reader should bear in mind that the small sample of respondents (n = 22) resulted in relatively few of

the observed correlational associations achieving the threshold .05 level of significance. Nevertheless, a number of the correlations were strong, indicating meaningful associations between variables in our data.

Table 1. Correlations for Measures of Treatment Effectiveness and Patient Characteristics

	Onset Age	Length of Illness (years of disorder)	WD	BMI	Age
Measure					
ATG	-.24	.08	-.31	-.48*	-.20
MTG	-.37	.12	-.42	-.49*	-.31
Recovery Progress	-.14	-.21	-.29	.10	-.21
Recovered	-.12	.11	-.29	-.13	-.16
Ever Relapsed	-.04	-.19	.64*	.44	-.11
Times Relapsed	-.10	-.62*	-.50*	-.15	-.36
Length of Relapse	-.58*	-.01	-.26	.07	-.56*

Note. *p < .05; WD = Weight discrepancy; ATG = Achieved treatment goals; MTG = Maintained treatment goals after discharge.

Respondents were presented with two questions concerning treatment goals. The first asked "While participating in SACRED's Day Program, what was your level of success in achieving these treatment goals?" (Previously in the survey, respondents had been asked to identify the specific treatment goals that they pursued in SACRED.) The second question was, "After being discharged from SACRED, what has been your level of success in achieving these goals?" A value of 1 was assigned to an answer indicated that "All of the goals" were achieved. A value 2 was assigned to "Most goals were achieved," a value of 3 of a "Few goals," and a value of 4 to "None of the goals were achieved."

As Table 1 shows, only BMI was significantly correlated with these two measures. Respondents with higher BMI values were more likely to report that "All" or "Most" goals were achieved, both during their treatment at SACRED and after discharge from SACRED. In contrast, respondents with lower BMI values were more likely to report "Few" or "No" goals were achieved. Further investigation showed that the respondents diagnosed with anorexia nervosa (AN) were largely responsible for this association. These respondents tended to have lower BMI values than those not receiving this diagnosis (M = 24.57, SD = 31.69 versus M = 45.75, SD = 0.35; t = 6.72, p < .001). An AN diagnosis was negatively correlated with BMI (r = -.55, p < .05). In addition, an AN diagnosis was correlated with both attainment of treatment goals at SACRED (r = 0.43, p < .05) and maintenance of treatment goals (r = 0.48, p < .05), indicating that respondents with this diagnosis were less likely to report success in achieving goals both at SACRED and after discharge. Those without an AN diagnosis had a mean of 1.0 (SD = 0.0) on goal attainment at SACRED, meaning that they reported achieving all of their goals, whereas those with an AN diagnosis reported a value of 2.24 (SD = 0.94), or only "Most" of their goals were achieved (t = 6.01, p < .001). With respect to maintaining their goals after discharge, those without an AN diagnosis reported maintaining "All" of their goals (M = 1.0, SD = 0.0), and those with an AN diagnosis reported

maintaining "Most" of their goals ($t = 6.97$, $p < .001$). Thus, the strong association in Table 1 between BMI and attainment of treatment goals at SACRED and the maintenance of treatment goals upon discharge reflects a confounded relationship between AN and low BMI. Those respondents with an AN diagnosis tended to report lower BMI values, and, in turn, were less likely to report achieving treatment goals at SACRED or to maintain these goals after discharge.

Three indicators of relapse from treatment were obtained from the survey responses. The first asked respondents whether they had relapsed from the treatment they received at SACRED, with a 1 assigned to a "yes" response and 2 to a "no." The second asked them how many times they had relapsed since being discharged from SACRED, and the third asked them the average length of these relapses. Table 1 indicates a significant positive relationship between weight discrepancy and whether or not the respondent reported a relapse; i.e., the greater the discrepancy between a respondent's actual weight and desired or ideal weight, the less likely they were to indicate that they had relapsed. That is, respondents with a smaller gap between actual and ideal weight were more likely to relapse. Again, we find that respondents with an AN diagnosis were responsible for this association. These respondents tended to have a significantly smaller actual to ideal weight discrepancy ($M = 25.71$, $SD = 31.68$) versus those patients with another diagnosis ($M = 90.55$, $SD = 65.69$; $t = 2.37$, $p < .05$). The negative correlation between an AN diagnosis and weight discrepancy ($r = -0.57$, $p < .05$) suggests that these respondents confounded the relationship between relapse and weight discrepancy. Sixty-seven percent of the respondents without an AN diagnosis reported that they had not relapsed after discharge, versus only 28.6% of respondents with an AN diagnosis reported that they had not relapsed ($\chi = 1.71$, $p = 0.19$). In general, respondents with an AN diagnosis clearly were more likely to relapse.

While Table 1 indicates that none of the demographic variables were significantly related to reports of being in "recovery," all of the respondents without an AN diagnosis felt that they were "recovered," but only 80% of respondents with an AN diagnosis did ($\chi = 0.73$, n.s.). A comparison of mean responses for this measure of treatment efficacy found significant differences ($t = 2.18$, $p < .05$).

Number of times a respondent relapsed was correlated in Table 1 with weight discrepancy and number of years that a respondent reported suffering from an eating disorder. In the survey, a value of "1" was assigned if a respondent reported relapsing 1-2 times, with an upper value of "5" if there had been more than 20 relapses. Thus, respondents who reported more years of suffering from an eating disorder tended to have fewer relapses. Respondents with a greater discrepancy of actual versus ideal weight also reported fewer relapses. These patients reporting fewer relapses were largely those without an AN diagnosis, while patients with an AN diagnosis reported more relapses.

Summary of Correlational Analysis

Attainment of treatment goals while attending SACRED and maintenance of these goals after discharge were highly correlated with a respondent's BMI; specifically, respondents with lower BMI values tended to report that they had attained fewer of the goals that they identified as important during their intake interview. In addition, these respondents reported greater difficulties maintaining these goals after discharge. Further statistical analysis

revealed that respondents with these low BMI values tended to have an AN diagnosis. Respondents diagnosed with other eating disorders, i.e., EDNOS, were more successful in achieving and maintaining their goals.

This theme also continued for measures of relapse, e.g., number of relapses and length of relapses. For these measures of treatment success, the mediating variable was weight discrepancy. Respondents with an AN diagnosis tended to report a smaller "gap" between actual weight and ideal weight; in turn, both an AN diagnosis and smaller weight discrepancy were strongly associated with a greater probability of relapse and number of relapses.

DISCUSSION

This study explored, from the patient's perspective, the evaluation of a day treatment program for eating disorders using a 12-step model, and, specifically, the spiritual health benefits of this treatment model. Patient characteristics were also analyzed to provide insight into the eating disordered women who entered this unconventional treatment program.

From the perspective of the 22 former patients interviewed in this study, their experience at SACRED was a success, though the majority of our sample (13 of 22) had not been treated in any other program prior to their enrolment in SACRED, making it difficult to compare treatment experiences. A majority of the respondents reported that at the time of discharge they had achieved all or most of their treatment goals. "But for" their participation in SACRED, 82% reported that they would be worse off in terms of physical health, 81.8% reported that they would be worse off psychologically, and 77.3% reported that they would be worse off in terms of spiritual well-being. Sixty-eight percent reported that they would likely be dead had they not received treatment from SACRED. After completing SACRED's Day Program, most believed that they were "better" or "much better" in terms of social well-being, spiritual well-being, physical health, and psychological health. The majority of the respondents reported improvement in a wide range of skills, relationships and sense of well-being. Notable exceptions were an ability to prevent or prepare for relapse, reported by only 54.5% and the ability to get back on track after a relapse.

Most respondents reported that they agreed that they were happier and healthier overall because they had learned to take care of themselves; that they had learned at SACRED to take better care of themselves spiritually, psychologically, socially, physically, and that they had learned to live and cope with life without their eating disorder. Most respondents reported successfully learning a wide range of skills such as eating three meals a day, prayer and meditation, taking responsibility for their lives, attending 12-step group meetings, and taking better care of themselves overall.

One of the unique features of SACRED was its commitment to keeping in touch with patients after they had discharged. Fully 82% of our sample had contacted SACRED following discharge. The majority of the respondents contacted SACRED within 3 weeks following discharge, most of which contacted SACRED in three weeks or less. All of the respondents made contact to gain support, stay connected, or to stay on track with regard to recovery/sobriety.

Another indicator of the success of this program was the lower need for medical treatment of their eating disorder following discharge. The majority of the respondents

reported seeing a physician for treatment of their eating disorder less often following discharge from SACRED. Sixty-four percent reported having a relapse(s) following discharge from SACRED. Of those who relapsed, 42.9% had relapsed more than 20 times. When relapses occurred, they tended to last less than a week. For those who relapsed, they were most likely to seek support from the SACRED physician, family members, 12-step group meetings, or friends.

Our correlational analysis showed that treatment success was more problematic for patients with an AN diagnosis. These individuals tended to report less success in achieving treatment goals during their stay at SACRED and less success in adhering to treatment goals after discharge. They also reported a greater likelihood of relapsing and having more relapses after discharge. It is our belief, however, that the 12-step focus of SACRED overall was more beneficial for individuals with an AN diagnosis than other treatment approaches. Additional research is needed to explore the unique sources of difficulties for this category of eating disordered patients.

Implications for Research and Practice

We believe it is important to highlight patient characteristics and the patient's perspective of treatment effectiveness and satisfaction in a 12-step day treatment program to help others in the field develop specialized programs that are effective, yet tailored to meet patients' needs and multi-dimensional aspects of their health—physical, psychological, social, and spiritual health. We also believe it is important to reiterate that the SACRED program was developed as a not-for-profit service in the public sector with the aim of increasing access to care for all eating disorder patients at minimal cost. This program could be modified for the private sector where there are fewer limits imposed by governmental or other public funding sources, or where the program is specific to just one eating disorder diagnosis. Our data clearly show that a generalized 12-step program cannot necessarily serve all patients equally effectively.

Patient characteristics data shed light on what can be expected in terms of the types of patients that might be entering residential/day treatment settings or seeking a 12-step approach. This study is important as it gives a preliminary snapshot of the usefulness of a 12-step approach in specialized treatment for women across the eating disorder spectrum. Since SACRED was based on a nontraditional way of thinking about the treatment of eating disorders, placing the responsibility for sustained change on the patient's shoulders, we believe that it is important to evaluate this kind of program from the patient's perspective via subjective self-reports rather than with traditional objective measures. Thus, measuring recovery/sobriety and spirituality, e.g., spiritual health outcomes, in addition to physical, psychological and social health outcomes would be both appropriate and expected. We recognize that objective measures may have complimented and augmented our findings. For example, it would be of interest to use objective measures such as the Spiritual Well-Being Scale (SWBS: Paloutzian & Ellison, 1982) or the Spirituality Self-Rating Scale (SSRS: Galanter et al., 2007 to illuminate better the spiritual health benefits of a 12-step treatment model and how patient's experience of spirituality might change with recovery.

The literature in this area suggests a 12-step approach has the potential to enhance residential and day treatment programs for eating disorders (e.g., Johnson & Sansone, 1993;

Johnson & Taylor, 1993; Richards et al., 2007). Our study supports and extends these findings by presenting data that suggests incorporating an ABA 12-step philosophy into residential/day treatment programs may be effective. This 12-step treatment model may be particularly helpful for women with anorexia nervosa or bulimia nervosa who report a history and/or co-morbidity of substance use/dependence, or long-standing chronicity who might feel hopelessness about successful treatment and recovery and thus, require a unique, unconventional intervention.

The concept of "hope" merits study in future research since it has been shown that lower hope is linked to higher eating disorder symptomatology in women (Boisvert, 2006; Boisvert & Harrell, 2013b). Quite possibly, women with lower hope and/or more severe eating disorder symptomatology might benefit from the incorporation of an ABA 12-step approach in residential/day treatment settings such as that used by SACRED.

More research is needed to evaluate if 12-step programs for eating disorders, e.g., ABA, OA, are appropriate interventions for those with less severe symptoms as well as those with more severe symptoms consonant with level of care, e.g., residential/day treatment setting. In addition to evaluating the clinical utility of ABA and OA in reducing eating disorder symptoms, there is a need to identify more precisely when these 12-step programs might be most suitable or contraindicated across the eating disorder spectrum.

Addressing spiritual issues and applying spirituality-oriented interventions to clinical eating disorders may also enhance treatment outcomes (Berrett, Hardman, & Richards, 2010; Hardman, Berrett, & Richards, 2003, 2004; Richards et al., 1997, 2006; Smith, Bartz, & Richards, 2007; Smith, Hardman, Richards, & Fischer, 2003). Clinicians should consider the potential benefits of incorporating spiritual elements into treatment while remaining respectful of patients' beliefs. They also might address spiritual issues or matters in case formulation and treatment plans (Dell & Josephson, 2007). Failure to do so may be a missed opportunity to promote the patient's vision of self (Jerslid, 2001), personal growth and holism.

Richards et al. (1997) have offered suggestions in this regard, including: teaching spiritual concepts, religious bibliotherapy, prayer, spiritual imagery or meditation, encouraging forgiveness, referral for spiritual/religious direction, and involvement in the religious community. A clinician who chooses to teach spirituality should focus on those particular aspects that counteract harmful secular cultural values that emphasize unattainable thinness goals. At this point in time, research has not linked specific features of spiritual well-being with healthy attitudes towards body satisfaction and acceptance. Richard et al.'s (1997) suggestions may encourage healthy spiritual development, thereby preventing women from becoming at-risk. Adjunct interventions with a spiritual health component that encourages patients to commune with nature, animals, e.g., dog-walking, and the universe (see Boisvert & Harrell, 2014c, 2015) might augment traditional and nontraditional interventions (Madden, Fogarty, & Smith, 2014). In addition to promoting spiritual health, the human-animal bond can complement 12-step programs with their emphasis on strong social ties. More studies on the use of animal-assisted therapy (AAT) or animal-assisted activities (AAA) as an adjunct intervention to 12-step programs for eating disorders are vital to broadening our knowledge of treatment options.

Although there has been an integration of spirituality in many treatment settings, there is limited data assessing its success. For example, Berrett et al. (2010) identified 150 eating disorder treatment programs that addressed religious or spiritual issues. Similarly, Frisch et al.

(2006) determined that many specialized eating disorder treatment programs have a 12-step component, but did not indicate the degree to which these programs emphasize this philosophy. Spirituality is not routinely considered nor assessed in eating disorder program evaluation studies, seriously limiting our understanding of comprehensive and holistic treatment and care. Spirituality in the context of a 12-step program such as SACRED may promote an attitude or mindset that facilitates some patients' openness and readiness to change. It may be influential in a patient's choice of a given treatment program or in promoting adherence to the program's behavioral expectations, e.g., compliance with food plan. It may also be influential in a patient's short- and long-term engagement in 12-step programs or groups, serving as a vehicle for sustaining short- and long-term recovery.

Further investigation is needed into the role played by spirituality in relation to readiness for change at the time of admission to residential treatment (McHugh, 2007) or maintenance of change following discharge from residential treatment (Cockelle, Zaitsoff, & Geller, 2004). Spiritual dimensions in recovery (Matusek & Knudson, 2009) and stage of change processes pre- and post-treatment and in recovery might also be of interest (Keski-Rahkonen & Tozzi, 2005; Touyz et al., 2003). Qualitative studies of maintenance of change following residential treatment have also emphasized the role of social support, revealing that speaking with someone who recovered is a crucial factor in eating disordered women's recovery (e.g., Cockell et al., 2004). Positive, peer-driven support may prove to be critical to an eating disordered women's recovery in a residential or day treatment setting. While a few studies of residential treatment programs have casually commented on the use of recovered staff as a key component of treatment (e.g., Brewerton & Costin, 2011a, 2011b; Johnson & Sansone, 1993; Johnson & Taylor, 1996), it has not been explored in the context of a ABA 12-step treatment model like that of SACRED.

While research on spirituality in women with eating disorder symptomatology is growing (Boisvert, 2006; Boisvert & Harrell, 2012, 2013a, 2015, 2016), more clarity is needed on how women with clinical eating disorders experience it in treatment settings incorporating a 12-step approach. Many of the women we studied ascribed importance to it in their treatment and hence, achieving of spiritual health benefits. Chappel and DuPont (1999) have asserted: "The great strength of 12-step programs is that they allow each member to have whatever spiritual experience they can attain, including none at all" (p. 442). Thus, another advantage of 12-step programs is that patients can tap into as much or as little spirituality as they wish in order to benefit—deepening their religious devotion and faith or remaining agnostic or atheist. Some research suggests those who are more likely to initiate and sustain 12-step attendance, benefitting the most, are those who are spiritual/religious oriented (Tonigan, Miller, & Schermer, 2002). Other advantages of the 12-step philosophy when treating eating disordered women include engendering hope and faith, and offering structure, a common language and a support network (Johnson & Sansone, 1993; Johnson & Taylor, 1996). While we did not specifically examine these advantages in our study, we believe they existed and were a part of respondent's treatment experience and satisfaction with the SACRED program.

Certain patient characteristics, e.g., duration of illness, level of hope, might influence how women experience the advantages of a 12-step approach in a residential/day program treatment setting. In fact, women with "difficult-to-treat eating disorders," such as those with an AN diagnosis, appear to be better suited to the integration of a 12-step approach into traditional interventions in residential treatment (Johnson & Sansone, 1993; Johnson & Taylor, 1996), particularly when compared to outcomes in more traditional treatment

programs. Further study is needed to determine whether eating disordered women can benefit equally by a 12-step abbreviated day treatment program versus a 12-step intensive residential treatment program.

Clinicians should consider integrating 12-step programs into traditional interventions and be comfortable with the spiritual dimensions of treatment and recovery from addictive behaviors (Chappel & DuPont, 1999; Detar, 2011; Galanter, 2005, 2007; Khantzian & Mack, 1994; Kurtz, 1997; Kurtz & Ketchum, 1992; Schenker, 2009), including eating disorder behaviors. Clinicians often report referring their eating disordered patients to 12-step groups in the community such as OA for adjunct treatment (von Ranson, Wallace, & Stevenson, 2013). Clinicians need to recognize the therapeutic value of 12-step programs goes well beyond adjunct treatment, and that referring eating disordered patients to residential/day treatment programs based on a 12-step philosophy has many advantages. Our study suggests important health benefits, notably spiritual, of patients entering an ABA 12-step program such as SACRED in seeking treatment for a wide range of eating disorders, particularly anorexia nervosa. Clinician's awareness and knowledge of 12-step programs, particularly ABA, and their advantages during treatment and post-discharge is essential in the context of service hierarchy, i.e., outpatient to inpatient.

This study makes a unique contribution to the literature by highlighting the potential benefits of a 12-step day treatment program for eating disorders and possesses a number of strengths. One strength of our study was the highly detailed nature of the survey, most importantly respondent's health and well-being after treatment at SACRED and the skills learned in the program that contributed to maintaining treatment goals. Too few studies report what skills were learned in treatment programs, limiting our insight into what skills can translate into good outcomes.

Another strength of this study was the inclusion of women across the eating disorder spectrum. We found some significant relationships between participant characteristics and measures of effectiveness despite our small sample. Although statistically small they are clinically compelling, helping us to appreciate how the ravaging effects of an eating disorder can influence the achievement and maintenance of treatment goals, especially for women with anorexia nervosa.

In addition to the positive aspects of this study, there are notable limitations. First, patients were not selected for inclusion based on set criteria; they self-selected the facility for treatment. Thus, there exists a variety of confounding variables as to why women seek a day treatment program, with eating disorder severity only being one of them.

Second, these data were collected at a single facility, and therefore study data are limited to women who chose this program. Given the growing number of residential and day treatment facilities across North America and the high relapse rates for most outpatient treatment (Keller et al., 1992), knowledge about who is treated can be important in designing successful programs. To illustrate, despite multidisciplinary efforts, outpatient treatment is effective in only 40-50% of patients with anorexia nervosa and bulimia nervosa in terms of achieving complete recovery, making overall prognosis poor (Joy, Wilson, & Varechok, 2003). Knowing which women might maximally benefit from a 12-step approach in residential or day treatment programs, or be most vulnerable to drop-out in these treatment settings could potentially reduce relapse.

A third limitation is that this study is largely descriptive; certain variables were not controlled for and unexpected relationships might have influenced the findings. Still, our

limited findings provide us with a clinical picture of who seeks treatment for eating disorders at a day treatment program using a 12-step approach, their self-reported assessments of SACRED, and insights into treatment effectiveness and reduction in post-discharge relapse.

As stand-alone treatments, the effectiveness and efficacy of 12-step programs for eating disorders are questionable, as they remain untested. Although our results have clinical relevance, a limitation is the absence of a control or comparison group. This fourth limitation makes it impossible to conclude definitely that the 12-step approach used in the SACRED program was the cause of these patients' reported improvements, or necessarily superior in outcome to non-12-step programs. However, it is very unlikely that these patients would have improved to the extent that they did on their own. Many respondents reported a history of being "treatment refractory" in that they had failed prior outpatient, inpatient and/or residential programs prior to attending the SACRED program. Along these lines, we are unaware of any study which compares the efficacy of a 12-step approach such as SACRED's for eating disorders to treatment success in 12-step approaches to alcoholism or other addictions. Are 12-step programs generalizable to a full range of health problems?

A fifth limitation is that our results do not bear directly upon the question of whether the SACRED program's 12-step philosophy has anything to do with the improvements reported. The methods of this study did not allow for an analysis of the "active ingredients" which may have contributed to the improvements. In this regard, we cannot know with certainty if aspects of the program such as meal support, attending 12-step group meetings, or use of recovered staff were more effective than other aspects. Indeed, who are the key personnel in an ABA 12-step program treating eating disorders? Therapists? Dieticians? Recovered staff? Other patients?

Finally, our current sample size was small and therefore limited. As with our study, a common methodological limitation of studies on treatment effectiveness and outcomes in eating disordered adults is that they are characterized by small sample sizes (for examples, see Ben-Porath et al., 2010; Birchall et al., 2002; Freeman, 1992; Howard et al., 1999). Longitudinal studies using larger samples of women may afford the best opportunity to evaluate the treatment effectiveness of ABA 12-step programs in residential/day treatment settings for eating disorders.

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Publications (Last 3 Years):

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