# Disordered Eating Symptoms in Women Veterans: Sociocultural Influences and Treatment Preferences in Primary Care Behavioral Health

## INTRODUCTION

- Disordered eating symptoms (DES) include maladaptive attitudes and eating behaviors (e.g., body dissatisfaction, dietary restriction, subjective binge eating) that may not meet full criteria for an eating disorder diagnosis. Research has shown that DES are common among women Veterans.[1]
- Despite recent research[2] and clinical care initiatives for DES and eating disorders within the Veterans Health Administration (VHA),[3] a known gap exists in terms of the best approach to treat these concerns in Veterans.
- The Primary Care Behavioral Health (PCBH) model offers several potential advantages for treatment: enhanced accessibility, interdisciplinary collaboration, and embedded behavioral health professionals who are positioned to address emotional and behavioral symptom management.[4]
- However, little is known with regard to Veterans' perceptions of DES, their preferences to address these symptoms, or factors that may affect their engagement in care within VHA PCBH. The present study used qualitative methods to gather patient feedback in these areas.

## METHODS

- Participants were purposefully sampled[5] from a previous study on the prevalence and correlates of DES among women veterans.[1]
- Semi-structured interviews were conducted with women veterans who reported DES on the Eating Disorder Examination Questionnaire (EDE-Q).[6]
- Interviews examined factors that influence women veterans' weight, appearance concerns, and eating behaviors; preferences in addressing DES; and opinions on ways to improve their related healthcare experience. Interview questions were rooted in prior research on: 1) medical and mental health (MH) service use among individuals with DES[7,8]; and 2) the compensatory health beliefs (CHB) model.[9]
- Interviews were recorded and transcribed. A directed content analysis[10] [Table 1] was used to code text segments based on healthcare utilization factors (i.e., treatment description, facilitators, barriers) and constructs from the CHB model (e.g., health goals, motivational conflicts and management strategies).[9]

## RESULTS

- Twelve women participated ($M_{age}$ = 54 years, *SD* = 8.4, *Rg* = 36-64), most of whom identified as non-Hispanic (91.7%) and Caucasian (83.3%). [Table 2]
- All subjectively reported problems with eating or weight. On standard measures:
  - 41.7% reported clinically-significant overall DES ($M_{EDE\text{-}Q\ Total}$= 3.87, *SD*= 0.77, *Rg*= 2.76-5.45); 100% reported clinically-significant shape concerns per EDE-Q scores.[11]
  - Mild depression ($M_{PHQ\text{-}9}$= 7.3, *SD*= 11.1) and anxiety ($M_{GAD\text{-}7}$= 9.8, *SD*= 6.8) symptoms were evident, as were moderate PTSD ($M_{PCL\text{-}5}$= 31.6, *SD*= 23.1) symptoms.
- Results from the directed content analysis revealed three noteworthy themes [Table 3]. Participants identified:
  - Consistent long-term struggles with subjective binge eating, body dissatisfaction, and stigma related to weight.
  - Past treatment experiences that were largely limited to commercial programs and peer support-based weight management groups (vs. clinical care for DES).
  - A desire for DES to be addressed through a personalized, goal-based, and skills-focused approach in the context of an overall healthy lifestyle.

## DISCUSSION & FUTURE DIRECTIONS

- VHA PCBH Providers have opportunities to improve the identification and treatment of women with DES, and as access to specialty eating disorder services expands[12], can serve an important role in stepped care for DES.
- Though standard interventions for DES in PCBH are lacking, results suggest that patient-centered health and wellness interventions focused on skill development would be acceptable to patients.
- Development and evaluation of secondary and tertiary preventive approaches for DES is warranted in PCBH.

### Opportunities to Improve DES Management in PCBH:

- Discuss eating and weight management sensitively, as two of many components of a healthy lifestyle.
- Query whether patients have specific goals or concerns related to diet or weight; reports of DES may signal need for further screening.
- Review clinical and community-based options (e.g., nutrition consultation, pharmacotherapy, peer groups).
- Use shared-decision-making to discuss pros and cons of treatment options; conjointly develop a treatment plan when indicated.
- Problem-solve practical and personal barriers to treatment engagement.
- Monitor patient outcomes and re-evaluate goals and treatment needs accordingly.

**Table 1. Codebook**

| Major Theme | Related Codes | Exemplar Quotations |
|---|---|---|
| **DES** | Appearance/Weight/ Shape Concerns<br>Binge Eating Behavior<br>Eating Expectancies<br>Purging Behavior<br>Non-Purging Compensatory Behavior | "I always feel happier when it's lighter, of course. And then when it starts to creep up and your clothes start getting tight, then I feel disgusted with myself…"<br>"Well, I start searching for stuff around the house. And… uncontrollably I'll just start munching on something." |
| **Symptom Management** | Professional Advice/ Treatment<br>Peer Support<br>Self-Management | "The dietician that I'm seeing, I saw her a couple years ago, and she got me on a track of thinking about different ways to eat."<br>"…I try not to keep [chips] in the house, too, because it's hard to say no." |
| **Treatment-Seeking** | Treatment Facilitators<br>Treatment Barriers | "She made me feel like I was inconveniencing her… Then when she recommended a group, I felt like she was dumping me." |
| **Cross-Cutting Themes** | Compensatory Health Beliefs<br>Sociocultural Factor (e.g., family, military) | "And so, I'll keep eating just because I think, well, I'm going to go back on my strict diet tomorrow. So, I might as well get it all in tonight." |

**Table 2. Descriptive Statistics**

| Variable | N (%) |
|---|---|
| **Race** | |
| African-American/Black | 1 (8.3) |
| Caucasian/White | 10 (83.3) |
| Other | 1 (8.3) |
| **Ethnicity** | |
| Latino or Hispanic | 1 (8.3) |
| Not Latino or Hispanic | 11 (91.7) |
| **Relationship Status** | |
| Married | 6 (50.0) |
| Divorced | 3 (25.0) |
| In a Committed Relationship | 1 (8.3) |
| Single | 2 (16.7) |
| **Education Level** | |
| Some College/ Technical Training | 4 (33.3) |
| College Degree | 4 (33.3) |
| Some Graduate Training | 1 (8.3) |
| Graduate Degree | 3 (25.0) |

**Table 3. Key Findings**

**DES:**
- Poor body image was prominent and associated with a desire to camouflage oneself. Increases in weight were linked to worsening mood.
- Subjective binge episodes were ubiquitous and linked to expectancies that eating would bring joy or reduce stress. Evenings and passive recreation (e.g., watching television) were cited as binge triggers.
- Though military service was frequently cited as a motivator to exercise, overall sociocultural influences (e.g., family messages/ pressure) were characterized negatively and as drivers of weight loss, emphasis on appearance, and perfectionism.

**Symptom Management:**
- Professional advice was typically limited to physicians' feedback to lose weight or see a nutritionist
- Peer support and commercial weight-loss groups were viewed as effective and easy to use
- Participants reported stimulus-control strategies (e.g., limiting access to sweets/ fatty foods) and intentional meal-planning as important self-management tactics

**Treatment Influences:**
- Facilitators included perception of a trustworthy, sincere, attentive, and relatable provider; personally-tailored treatment recommendations; and positive prior experiences with treatment and provider(s)
- Barriers included failure of providers to initiate conversations on eating/ weight; feeling judged by provider; unawareness/inaccessibility of treatment; and personal factors such as a preference for self-management, desire for quick results, amotivation, and resistance to change.

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**REFERENCES**

1. Bucholz, L.J., King, P.R., & Wray, L.O. (2018). Rates and correlates of disordered eating among women veterans in primary care. *Eating Behaviors*, 30, 28-34.
2. Slane, J.D., Levine, M.D., Borrero, S., Mattocks, K.M., Ozier, A.D., Silliker, N.,… Haskell, S.G. (2016). Eating behaviors: Prevalence, psychiatric comorbidity, and associations with body mass index among male and female Iraq and Afghanistan veterans. *Military Medicine, 181*, e1650-e1656.
3. Department of Veterans Affairs, (2016). Department of Veterans Affairs Report of the Advisory Committee on Women Veterans. Washington, DC: Department of Veterans Affairs.
4. Buchholz, L.J., King, P.R., & Wray, L.O. (2017). Identification and management of eating disorders in integrated primary care: Recommendations for psychologists in integrated care settings. *Journal of Clinical Psychology in Medical Settings, 24*, 163-177.
5. Palinkas, L.A., Horwitz, S.M., Green, C.A., Widsom, J.P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health, 42*, 533-544.
6. Fairburn, C. G., & Beglin, S. (2008). Eating disorder examination questionnaire (EDE-Q 6.0). In C. G. Fairburn (Ed.), *Cognitive Behavior Therapy and Eating Disorders* (pp. 309-313). New York: Guilford Press.
7. Bucholz, J. M., Hay, P. J., Rodgers, B., & Owen, C. (2007). Health service utilization for eating disorders: findings from a community-based study. *International Journal of Eating Disorders, 40*, 399–408.
8. Striegel-Moore, R. H., DeBar, L., Wilson, G. T., Dickerson, J., Rosselli, F., Perrin, N., … Kraemer, H. C. (2008). Health services use in eating disorders. *Psychological Medicine, 38*, 1465-1474.
9. Rabiau, M., Knauper, B., & Miquelon, P. (2006). The eternal quest for optimal balance between maximizing pleasure and minimizing harm: the compensatory health beliefs model. *British Journal of Health Psychology, 11*, 139-153.
10. Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*, 1277-1288.
11. Luce, K.H., Crowther, J.H., & Pole, M. (2008). Eating disorder examination questionnaire (EDE-Q): Norms for undergraduate women. *International Journal of Eating Disorders, 41*, 273-276.
12. Dognin, J., O'Roark, A., Dickson, K., & Garavoy, N. (2021). Multidisciplinary eating disorder treatment among women veterans: a culturally informed case-based approach. Presentation of the VACO Eating Disorder Initiative, March, 2021.