

Interventions for Anorexia Nervosa among College Students: A Review

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INTRODUCTION

- Anorexia nervosa (AN) commonly develop in late adolescence and carry over to adulthood.
- AN is an eating and feeding disorder characterized by the American Psychiatric Association as an inability to secure or maintain a healthy body-weight and distinguished by three diagnostic criteria, including an intense fear of becoming overweight, disturbances in body-image, and persistent restrictive or compensatory dieting behaviors.¹
- Many college students are exposed to high stress and foreign environments during their university years, placing this population at risk for undiagnosed and untreated AN.
- The prevalence of AN among college students (3%) is higher than the general population (0.3%-1%) in the United States.²
- Although many colleges have tried to raise awareness and to combat AN, little is known about effective interventions for preventing and treating AN in the college population.
- **The purpose of this study was to review effective interventions in awareness, prevention, screening, and treatment of AN among college students.**

METHODS

STUDY DESIGN.

The literature search was conducted on interventions implemented on college students with or at risk to develop AN.

DATABASE.

Databases PubMed and Google Scholar electronic databases to identify studies published from 2002 through 2017.

INCLUSION AND EXCLUSION CRITERIA.

Sample inclusion criteria consisted of quantitative studies that (1) published in English, and (2) included interventions about AN's awareness, prevention, screening, and treatment among college students. Exclusion criteria consisted of qualitative studies, literature reviews, expert opinions, case reports, and editorials.

RESULTS

- A total of **6 research** studies met the inclusion criteria and were included in the review (Table 1).^{3,4-8}
- The following themes emerged:
 - (1) Among college age women with high weight and shape concerns consistent intervention programs, including Internet-based cognitive-behavior therapy (CBT), Cognitive Dissonance (CD), Food, Mood, and Attitude program, and education programs for reducing stigma toward AN significantly reduced weight and shape concerns and early symptoms of AN;
 - (2) Students who participated in CBT, CD and educational programming decreased restraint in eating behaviors, decreased eating disorder pathology, and body dissatisfaction as compared to control groups who did not receive the interventions;
 - (3) female students are more interested in dieting compared to male students and thus tend to experience abnormal eating attitudes and behaviors in their college years.^{3,4-8}

Table 1. Summary of Findings.

| Article | Type of study | Type of intervention | Duration | Follow-up time | Outcome measure |
|-------------------------|-------------------------------|----------------------------------------------------------------------------|-----------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| Becker et al. (2005) | A randomized controlled trial | An Internet-based cognitive-behavioral program | 8 weeks | Baseline, posttest, 12-month post- intervention. | Time to onset of clinical ED, change of ED symptoms. |
| Franko et al. (2005) | A randomized controlled trial | A computer-based Food, Mood, and Attitude program | 3 months | Baseline, postintervention, and 3-month post-intervention. | Baseline perception of body image, post intervention perception of body image. |
| Na et al. (2018) | A randomized controlled trial | Baseline and post-test assessment, cognitive dissonance prevention program | 24 months | 28-days, one- and two-year post-intervention. | Reduction in dietary restraint, body satisfaction and eating disorder pathology. |
| Sebastian et al. (2017) | A randomized controlled trial | An AN education program | N/a | Baseline, post education on day of contact. | Stigmatizing attitudes toward AN. |
| Stice et al. (2013) | A randomized controlled trial | Two AN education programs for reducing AN stigma | N/a | Pre-and post-intervention, and at 8 weeks follow-up. | IGT scores (decision making test) and those at risk for AN compared to IGT scores of control. |
| Taylor et al. (2006) | A randomized controlled trial | A group-based Healthy Weight prevention program | 4 hours | Pretest, posttest, and at 6-month, 1-year, and 2-year follow-ups. | Body satisfaction, eating disorder symptoms and health behavior change. |

DISCUSSION

- Therapeutic interventions such as CBT and CD were successful in thwarting restrictive eating behaviors among college students.
- Colleges and campus health organizations need to address awareness of AN and eating restriction before the onset of AN.
- Therapeutic interventions such as CBT should be implemented within college campuses to address risk behaviors toward AN such as dieting, weight and shape concerns, and abnormal restrictive behaviors.
- None of the AN intervention included in this review had been done prior to college enrollment. Future studies are needed to examine the benefit of applying an AN intervention before students begin college life for long-term AN prevention.

CONCLUSIONS

AN intervention in college campus will equip students to be educated regarding their own health and self-care as well as their fellow students, thus facilitating openness and vulnerability with which to discuss disordered or unhealthy attitudes toward eating and ultimately prevent AN in this population.

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