



The Relationships Between Orthorexia Nervosa And Body Image In Nursing Students

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Abstract

This study was carried out to determine the relation between the risk of orthorexia nervosa and body image. Following a descriptive, cross-sectional design, this study was performed with 312 university-level nursing students between April and June of 2019. Data were gathered using a questionnaire prepared by the researcher, the Orthorexia-11 Questionnaire, and the Multidimensional Body-Self Relations Questionnaire. The data obtained were evaluated using SPSS 21 with percentages, means, a Chi-square test, and a correlation analysis. The students received moderate scores on the Orthorexia-11 Questionnaire. Students with a predisposition to orthorexia received higher scores for health orientation than those without orthorexia; and students with a predisposition to orthorexia had lower scores for Multidimensional Body-Self Relations Questionnaire. We found a significant positive relation between orthorexia and appearance orientation and a significant, negative relation between orthorexia and health orientation and body areas satisfaction. The findings further showed the existence of a relation between orthorexia and multidimensional body-self relations. As a result, we recommend that nursing students be evaluated in terms of orthorexia nervosa, that screening tests be performed in people at risk, that suitable precautions be taken, and that appropriate interventions be performed.

Anahtar Kelimeler: Orthorexia Nervosa, Body Image, Nursing Students.

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Öz

Bu çalışma hemşirelik öğrencilerinde ortoreksiya nervosa (ON) riski ve beden imajı ile ilişkisini belirlemek amacıyla yapılmıştır.

Tanımlayıcı-kesitsel tipteki bu çalışma bir üniversitede Hemşirelik bölümündeki 312 öğrenci ile (Nisan-Haziran 2019) yürütülmüştür. Veriler Anket formu, Orto11 ve Çok Yönlü Beden-Benlik İlişkileri Ölçeği ile toplanmıştır. Verilerin değerlendirilmesi SPSS 21 programında yüzdeler, ortalama, ki kare analizi, korelasyon analizi ile yapılmıştır. Ortoreksik eğilimi olan öğrencilerin sağlık yönelimi puan ortalaması ortoreksik eğilimi olmayanlara göre daha yüksek düzeyde; Çok Yönlü Beden-Benlik İlişkileri Ölçeği Toplam Puanı daha düşük düzeyde saptanmıştır. Orto11 ölçeği ile Görünüş Yönelimi arasında pozitif yönde; Orto11 ile Sağlık Yönelimi ile Beden Alanlarında Doyum arasında negatif yönde istatistiksel açıdan anlamlı bir ilişki olduğu saptanmıştır.

Verilerimiz Ortoreksiya Nervosa ile Çok Yönlü Beden – Benlik İlişkileri Ölçeği arasında ilişki olduğunu göstermektedir. Ortoreksiya Nervosa açısından hemşirelik öğrencilerinin ele alınması riskli bulunan gruplarda gerekli taramaların yapılarak önlemlerin alınması ve müdahalelerin yapılması gerekmektedir.

Anahtar Kelimeler: Orthorexia Nervosa, Sosyal Görünüş Kaygısı, Hemşirelik Öğrencisi

Introduction

Orthorexia nervosa (ON), first defined by Bratman and Knight in 1997, is defined as an obsession with healthy eating that begins as an obsession with eating what one perceives to be the right food and continues until the person maintains a restrictive diet and follows ritualized eating habits (Koven & Abry, 2015). It is characterized by (i) being excessively preoccupied with eating healthy foods, (ii) avoiding genetically engineered food as well as foods containing fat, salt, sugar, and unnatural/synthetic substances, (iii) being unusually anxious about one's health, and (iv) spending an exorbitant amount of time on purchasing, preparing, and eating healthy food every day (Çulhacık & Durat, 2017). Food preparation, the kitchen, and cooking tools are also important parts of obsessive rituals (Chaki, Pal, & Bandyopadhyay, 2013). ON does not mean simply to follow a healthy diet. On the contrary, it refers to making adherence to such a diet one's primary goal in life. People with ON hate themselves and experience a feeling of severe guiltiness when they abandon or violate the principles of their diet (Yeşil, Turhan, Tatan, Şarahman, & Saka, 2018). They believe that self-respect depends upon his/her dieting preferences (Tremelling, Sandon, Vega, & McAdams, 2017). Extreme dependence on healthy nutrition can reduce the variety of food eaten and can cause insufficient nutrition, osteopenia, hyponatremia, metabolic acidosis, pancytopenia, decreased levels of testosterone, and bradycardia (Koven & Abry, 2015).

Although neither the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) nor the International Statistical Classification of Diseases (ICD) includes ON in their works (Brytek-Matera, Fonte, Poggiogalle, Donin, & Cena, 2017), it shares a significant number of symptoms with typical and atypical eating disorders, obsessive-compulsive disorder, and somatic disorder. ON has a gradually increasing incidence, results in insufficient nutrition, a loss of social relationships and impairment of the quality of life (Duran, 2016). Among groups of people at risk are those who prioritize their body

image, such as women, adolescents, athletes, medical students, health professionals, dieticians, and performance artists (Duran, 2016; Çiçekoğlu & Tuncay, 2018). In a study examining nursing students' eating behaviors and orthorexic tendencies, nearly half of the students were found to be at risk of ON (Arslantaş, Adana, Öğüt, Ayakdaş, & Korkmaz, 2017). People who have received education on healthy nutrition value both their own nutrition and that of people they serve, which can lead to obsession with their own eating habits. Thinking about how food is prepared and spending most of the day thinking about food for health reasons are important risk factors that signal the potential development of eating disorders. Nursing students are also at risk of these disorders because they receive health education (Arslantaş et al., 2017). Because they have extensive knowledge about food and healthy eating, nursing students may attempt to control their weight to maintain their body image. In a study involving male and female university students, a multivariate linear regression analysis showed that female students with ON prioritized satisfaction with body parts, low fitness orientation, and the desire to maintain a low body weight over healthy eating (Brytek-Matera, Donini, Krupa, Poggiogalle, & Hay, 2016). Since dissatisfaction with one's body and signs of eating disorders are important factors likely to impair wellness and mental health in adolescents (Figueiredo, Simola-Ström, Isomaa, & Weiderpass, 2019), it is important to deal with perceptions of disrupted body image.

Concerning body image, individuals with ON are not interested in weight loss and do not display negative body image attitudes typical of patients with anorexia nervosa and bulimia nervosa (Brytek-Matera, Gramaglia, Gambaro, Delicato, & Zeppegno, 2018). However, there have been a few studies showing that patients with ON feel anxiety toward their body image and have a disrupted body image. The literature has found that body image is related to eating disorders (Figueiredo et al., 2019). In light of similarities between ON and other eating disorders, factors playing a role in the outset and persistence of eating disorders can affect ON. Being overly engrossed with excess weight, displaying a preoccupation with physical appearance, and having a history of an eating disorder are considered important predictors for ON (Brytek-Matera et al., 2018). Few studies have been conducted on the relation between ON and body image worldwide and none have been conducted in Turkey.

Therefore, it is important to examine the relationship between ON and body image in at-risk nursing students. It is possible for nursing students to turn healthy eating into an obsession. They may also attempt to eliminate their perceived negative body image through eating disorders. This descriptive, cross-sectional study was performed to determine this relation in nursing students.

Research Questions

1. What are the average scores of the students on the Orthorexia-11 Questionnaire and Multidimensional Body-Self Relations Questionnaire?
2. What are the differences in the means of participants' Orthorexia-11 Questionnaire and Multidimensional Body-Self Relations Questionnaire scores as per their socio-demographic characteristics?
3. Is there a relation between Orthorexia-11 Questionnaire and Multidimensional Body-Self Relations Questionnaire scores?

Material And Methods

Study Design And Sample

This descriptive, cross-sectional study was conducted with 312 university-level actively enrolled nursing students during the spring semester of the 2018–2019 academic year in Turkey. A data collection form was distributed to all the students who volunteered to participate in the study. The sample consisted of a total of 351 nursing students. There was no sample selection; the entire population was included within scope of the study in which 312 of the students (89%) volunteered to participate. Thirty-nine students who did not answer the questions excluded from the study. Data were collected using a questionnaire prepared by the researcher, the Orthorexia-11 Questionnaire (ORTHO-11), and the Multidimensional Body-Self Relations Questionnaire (MBSRQ).

Inclusion criteria: agreeing to participate in the study, filling out the scales completely.

Exclusion criteria from the study: not agreeing to participate in the study, filling the scales incompletely, or having a physical, metabolic, or mental disorder.

Survey Data Collection

Questionnaire Form

The questionnaire prepared by the researcher contained sixteen questions on socio-demographic characteristics, attitudes toward nutrition/diet, and height and weight. Body mass index (BMI) is the person's weight in kilograms divided by his/her height in meters squared ($BMI = \text{kg}/\text{m}^2$). People with a BMI of 18.5–24.9 kg/m^2 have a normal body weight, those with a BMI of 25.0–29.9 kg/m^2 are overweight, those with a BMI of 30.0–34.9 kg/m^2 are stage I obese, those with BMI of 35.0–39.9 kg/m^2 are stage II obese and those with a BMI of greater than 40.0 are stage III obese (Aktürk, Gül, & Erci, 2019).

Orthorexia-11 Questionnaire (ORTO-11)

Orthorexia-11 Questionnaire (ORTHO-11) was used to calculate the risk of ON. The original version of the questionnaire, Orthorexia-15, was developed by Donini et al. in 2005 and was adapted to Turkish by Arusoğlu in 2006. The questionnaire that Donini et al. used as a guide was Bratman's Orthorexia Test, which was composed of ten questions based on responses of yes or no. Questions 1, 3, 7, 9, and 10 in Bratman's Orthorexia Test were revised by Donini et al. and changed into a four-point Likert scale. In the resulting scale, participants are asked to report how they feel about each item by marking the responses always, usually, sometimes, or never. Items are scored for from one to four (Arusoğlu, 2006; Arusoğlu, Kabakci, Köksal, & Merdol, 2018).

Items 1, 2, 9, and 15 of the Orthorexia-15 Scale were deleted because they were not statistically significant¹. As a result, an 11-item question came to emerged (Ergin, 2014). Cronbach's alpha coefficient was 0.652 for this study.

1 Item 1: "Do you count the calories of what you eat?"

Item 2: "Do you have trouble deciding which food to eat when multiple choices are available?"

Item 9: "Do you think your psychological state affects your eating patterns?"

Item 15: "Have you eaten alone recently?"

The cut-off value used to evaluate the Orthorexia-11 Questionnaire in the present study was determined by utilizing the method adopted by Arusoğlu to adapt this questionnaire into Turkish. In this study values lower than 25 showed orthorexia.

Multidimensional Body-Self Relations Questionnaire (MBRSQ)

The MBRSQ is a 69-item, self-rating scale developed to assess one's body image attitudes. The original version of the scale was created by Winstead and Cash (1984) and contained 140 items. A shorter version, however, included 54 items and seven subscales. Since nine items loaded on the Body Areas Satisfaction Scale and we included six additional items about weight, the new short version comprised 69 items. The subscales are appearance evaluation, appearance orientation, fitness assessment, fitness orientation, health assessment, health orientation, and body satisfaction. Doğan and Doğan (1992) translated the scale into Turkish and performed item, validity, and reliability analyses. Content validity was achieved by comparing the scale with Hovardaoğlu's (1990) Body Perception Scale. The correlation coefficient of .58 between the scores for both scales was found to be significant. Cronbach's alpha coefficient for the correlation between the total score for the scale and the scores for its subscales was 0.94. Individuals responding to the scale are requested to select the response that best suits them. These choices and their scores are as follows: completely disagree (1), mostly disagree (2), indecisive (3), mostly agree (4) and completely agree (5). The scale also includes negative statements (i.e., 12, 13, 14, 25, 26, 27, 29, 30, 31, 33, 35, 37, 39, 40, and 41) that are inversely scored. Higher scores indicate a healthy body and positive self-image (Doğan & Doğan, 1992).

Following our own analyses, we attained a Cronbach's alpha coefficient of 0.834 in the current study.

Data Analysis

We used SPSS 21 to analyze data. Descriptive data were expressed in numbers, distribution of percentages, means, and standard deviations. We utilized a chi-square test to compare independent variables with ON and performed a correlation analysis to determine the relationship between scales. The results were deemed significant when the confidence interval was 95% and p lower than 0.05.

Ethical Approval

Ethical approval was obtained from Ethical Committee for Scientific Research at X University Medical School (X 25.02.2019-2019/71) and permission was received from the specific school where the study was to be performed. All of the students were informed about the study and their informed consent was obtained prior to the onset of the study.

Results

Of the total participants, 31.4% were first-year students, 58.3% lived in a small town for the longest period of their lives, and 87.5% lived in a nuclear family setting. Moreover, 28.8 percent were current smokers and 30.1% of the students did physical exercise regularly. A total of 91.3% of the participants valued their social image and 50% of the students were worried about becoming overweight, with 70.5% skipping some of their meals. While 78% of the students had a normal BMI, 24% displayed signs of orthorexia. The mean age of the students was 20.71±2.38 years.

Table 1. Descriptive Characteristics Of The Participants

Descriptive Characteristics	n	%
Year of Study		
1 st	98	31.4
2 nd	86	27.6
3 rd	72	23.1
4 th	56	17.9
Place of Residence		
Town	130	41.7
City	182	58.3
Family Structure		
Nuclear family	273	87.5
Extended family	39	12.5
Smoking		
Yes	90	28.8
No	222	71.2
Exercise Regularly		
Yes	94	30.4
No	217	69.9
Importance to Social Image		
Yes	285	91.3
No	27	8.7
Worried about Gaining Weight		
Yes	156	50
No	156	50
Skipping Meals		
Yes	220	70.5
No	92	29.5
Body Mass Index (BMI)		
BMI of <18.5 kg/m (slim)	33	10.6
BMI of 18.5-24.9 kg/m (normal)	224	71.8
BMI of 25.00-29.9 kg/m (obese)	45	14.4
BMI of 30.00-34.9 kg/m (Class I obese)	10	3.2

Orthorexia Scale

Displaying signs of orthorexia (lower than 25)	75	24
Not displaying signs of orthorexia (25 or higher)	237	76
Age	Mean (SD)	
	20.71 (2.38)	

Abbreviation: SD, standard deviation

Table 2 illustrates the distribution of orthorexia tendency by various socio-demographic characteristics. The percentage of students with orthorexia doing regular physical exercise was significantly higher than that of students with orthorexia who did not engage in regular physical exercise ($p < 0.05$). The number of students with orthorexia skipping some of their meals was significantly higher than that of students with orthorexia who did not skip any meals ($p < 0.05$). Whereas 65.3% of students with orthorexia were worried about becoming overweight, 34.7% of students with orthorexia were not ($p < 0.05$).

Table 2. Distribution Of The Students With Orthorexia By Their Socio-Demographic Features

	Orthorexic	Nonorthorexic	Total	P
Descriptive Characteristics	n (%)	n (%)	n (%)	
Engaging In Regular Exercise	98	314	98	
Yes	30 (40)	64 (27)	94 (30.1)	
No	45 (60)	173 (73)	218 (69.9)	0.033*
Skipping Meals				
Yes	45 (60)	175 (74.2)	220 (70.7)	
No	30 (40)	61 (25.8)	91 (29.3)	0.019*
Worried About Becoming Overweight				
Yes	49 (65.3)	106 (44.7)	155 (24)	
No	26 (34.7)	131 (55.3)	157 (76)	0.002*
Chi-square test, * $p < 0.05$				

Table 3 compares the orthorexia score with the total score received from the Multidimensional Body-Self Relations Questionnaire and the scores for its subscales. There was a significant difference between orthorexia and health orientation in the Multidimensional Body-Self Relations Questionnaire ($p < 0.05$). Students with orthorexia had a significantly higher health orientation score than those without orthorexia ($p < 0.05$). Students with orthorexia earned a significantly lower total score on the Multidimensional Body-Self Relations Questionnaire than did those without orthorexia ($p < 0.05$).

Table 3. Comparison Of Orthorexia Tendency With Scores For Multidimensional Body-Self Relations Questionnaires And Its Subscales

Multidimensional Relations	Body-Self	Orthorexic Mean (SD)	Non-Orthorexic Mean (SD)	F	P
Appearance Evaluation		21.64 (4.68)	21.53 (3.84)	4.81	0.841
Appearance Orientation		38.16 (8.77)	37.11(7.49)	0.040	0.313
Fitness Evaluation		21.41 (4.24)	21.29 (3.50)	3.30	0.82
Fitness Orientation		29.77 (6.03)	28.94 (6.09)	2.88	0.30
Health Evaluation		20.29 (7.02)	19.44 (3.75)	0.78	
Health Orientation		38.41 (8.72)	36.12(5.02)	9.22	0.005*
Total Score for Multidimensional Body-Self Relations Questionnaire		30.37 (9.31)	32.45 (7.38)	2.98	0.048*

t test for independent groups, *p< 0.05

Table 4 shows mean scores for Orthorexia-11 and Multidimensional Body-Self Relations Questionnaires. The mean total score of the students was 26.67±3.70 for ORTHO-11 and 197.67±26.99 for the Multidimensional Body-Self Relations Questionnaire. Participants’ appearance evaluation score was 21.55±4.05, their appearance orientation score 37.36±7.81, their fitness evaluation score 21.32±3.69, their fitness orientation score 29.14±6.08, their health evaluation score 19.65±4.75, their health orientation score 36.67±6.21, and their body satisfaction score 31.95±7.92.

Table 4. Mean Scores For Ortorexia Scale And Multidimensional Body-Self Relations Questionnaire

Minimum And Maximum Scores On Scales	Mean	Standard Deviation	Minimum	Maximum
Ortorexia Scale (11-44)	26.67	3.70	14	35
Multidimensional Body-Self Relations Questionnaire (57-285)	197.67	26.99	110	313
Appearance Evaluation (6-30)	21.55	4.05	9	30
Appearance Orientation (10-50)	37.36	7.81	18	92
Fitness Evaluation (6-30)	21.32	3.69	11	35
Fitness Orientation (9-45)	29.14	6.08	14	58
Health Evaluation (6-30)	19.65	4.75	9	72
Health Orientation (11-55)	36.67	6.21	19	90
Body Areas Satisfaction (9-45)	31.95	7.92	9	53

Table 5 summarizes the correlations between the scores on the Orthorexia-11 and Multidimensional Body-Self Relations Questionnaires. There was a significant positive relationship between scores on

the Orthorexia-11 Questionnaire and appearance orientation. Participants' appearance orientation decreased as their tendency for orthorexia increased. In addition, the relationship between the mean scores for the Orthorexia-11 Questionnaire and both health orientation and body satisfaction were significantly negative. In other words, as participants' tendency for orthorexia increased, so did health orientation and body satisfaction.

Table 5. Relationships Between Scores For The Orthorexia-11 And Multidimensional Body-Self Relations Questionnaires

	Orto- rexia Scale	MBSRQ	AE	AO	FE	FO	HE	HO	BAS
	R	r	r	r	r	R	r	r	r
Ortorexia Scale	1.000	-0.088	-0.044	-0.158**	-0.031	-0.108	-0.075	-0.137*	-0.127*
MBSRQ	-0.088	1.000	0.762*	0.631*	0.711*	0.638*	0.561**	0.693*	0.691**
Appearance Evaluation (AE)	-0.044	0.762**	1	0.453**	0.538**	0.394**	0.345**	0.433**	0.538**
Appearance Orientation (AO)	-0.158**	0.631**	0.453**	1	0.325**	0.248**	0.200**	0.329**	0.212**
Fitness Evaluation (FE)	-0.031	0.711**	0.538**	0.325**	1	0.466**	0.395**	0.404**	0.449**
Fitness Orientation (FO)	-0.2018	0.638**	0.394**	0.248**	0.466**	1	0.279**	0.393**	0.267**
Health Evaluation (HE)	0.075	0.561**	0.345**	0.200**	0.395**	0.279**	1	0.311**	0.294**
Health Orientation (HO)	0.137*	0.693**	0.433**	0.329**	0.404**	0.393**	0.311**	1	0.355**
Body Areas Satisfaction (BAS)	0.127*	0.691**	0.538**	0.212**	0.449**	0.267**	0.294**	0.355**	1

*p < 0.05, **p < 0.01

Discussion

We conducted the present study to reveal the risk of ON and the relationship between ON and body image. Participants received a mean score of 26.67 ± 3.70 on the Orthorexia-11 Questionnaire and 24% displayed signs of ON, which indicates moderate orthorexia. In a study on nursing students by Arslantaş et al. (2017), students received a mean score of 27.34 ± 4.53 for ON and 45.3% of the students were found to be at risk of ON. Grammatikopoulou et al. (2018) found that 68.2% of the dietetics students displayed a tendency for orthorexia in their study. Plichta, Jezewska-Zychowicz, & Dębski (2019) reported that students studying health-related fields had significantly lower scores on the Orthorexia-15 than those studying in fields other than health. Varga, Thege, Dukay-Szabó, Túry, and van Furth (2014) observed that orthorexia was observed in 6.9% of the general population and ranged between 35% and 57.8% in high-risk groups, such as healthcare professionals and artists. Previous studies have suggested that healthcare professionals should be tested for ON and that appropriate precautions should be taken. Considering that healthcare professionals constitute role models in society, nursing students should be tested as to whether they suffer from orthorexia. Although the number of students with orthorexia was

lower than that reported in the literature in the present study, it cannot be disregarded. We therefore recommend that this high-risk group be dealt with and that appropriate interventions be offered to them.

In the current study, students with orthorexia exercised less regularly, skipped fewer meals, and were less worried about becoming overweight than those without orthorexia. Previous studies have shown that unlike individuals with anorexia nervosa, individuals with ON do not skip meals (Scarff, 2017) and were more likely to disregard body weight (Segura-Garcia Ramacciotti et al., 2015). The lack of anxiety about gaining weight, skipping meals, and doing regular exercise in individuals obsessed with healthy eating found in the current study is therefore not unusual as is otherwise the case in individuals who obsess over eating healthy. Similarly, Roncero et al. revealed a significant relation between scores for Orthorexia-11 Questionnaire and doing regular physical exercise (Roncero, Barrada, & Perpiñá 2017). That said, however, Bóna et al. found a significant correlation between doing exercise more than once a day and orthorexia tendency (Bóna, Szél, Kiss, & Gyarmathy, 2019).

The students with orthorexia participating in the current study had a collective higher mean score for health orientation than those without orthorexia. Higher scores for health orientation indicate an awareness of one's health and an attempt to maintain a healthy lifestyle (Cash, 2015). This finding is consistent with the definition of ON as an obsession with healthy eating.

Previous studies have found that dissatisfaction with one's body, a warped body image, a history of dieting and weight gain, using unhealthy weight loss methods, and mental health problems (e.g., depression and anxiety) are related with disrupted eating behavior in university students (Bundros, Clifford, Silliman, & Neymas Morris, 2016). The students with orthorexia in the current study had earned higher scores on that Multidimensional Body-Self Relations Questionnaire than did those without orthorexia. We therefore assert that individuals with orthorexia perceive their bodies in a negative light. Brytek-Matera et al. proposed that orthorexic behavior is related to unhealthy or negative body image in students (Brytek-Matera et al., 2016), which is congruent with the results of the present study.

We likewise found a significant relation between scores on the Orthorexia-11 Questionnaire and appearance orientation, suggesting that the score for appearance orientation increases in tandem with one's score for orthorexia. In other words, individuals with orthorexia do not obsess over their appearance and do not exert great effort to look good. Likewise, Brytek-Matera et al. found a significant positive correlation between scores on the Orthorexia-15 and appearance orientation (Brytek-Matera et al., 2016). However, Barnes and Caltabiano (2017) found a significant negative relationship between orthorexia and appearance orientation was revealed.

The present study found a significant negative relationship between orthorexia and both health orientation and body satisfaction, meaning that as one's tendency for orthorexia increases, so does his/her health orientation and body satisfaction. Consistent with this finding, Brytek-Matera et al.

(2016) found a significant negative, relationship between scores earned on the Orthorexia-15 and both health orientation and body satisfaction. On the other hand, Barnes and Caltabiano (2017) reported a significant, positive relationship between scores for orthorexia and body satisfaction. Since individuals with orthorexia are obsessed with healthy nutrition and being healthy, they pay attention to their health and, as a result, become satisfied with how their body looks.

Limitations Of The Study

An important limitation of this study is that although it constitutes a large sample, it is limited to nursing students. That said, we focused on nursing students because orthorexia poses a risk for healthcare professionals in general. Despite these limitations, however, our results have the potential to make great contributions to the literature.

Conclusion

This study examined the relationship between orthorexia and body image in nursing students. Students with orthorexia earned higher scores on health orientation and lower scores on the Multidimensional Body-Self Relations Questionnaire than did those without orthorexia. It will be clinically useful to reveal the relation between ON and warped body image. Performing experimental studies to determine the effect of body image on orthorexia can offer guidance for treatment interventions for this condition. Since students studying in health-related fields are highly cognizant of eating healthy and, more generally, leading a healthy lifestyle, it is assumed that they will be at risk of ON. It is necessary for health professionals and health education institutions to consider orthorexia and how students perceive their physical appearance and, where necessary, to take precautions to prevent ON or make interventions to help students overcome it. Addressing students' negative body perceptions is important in preventing eating disorders. Not only should health professionals determine the eating disorders that nursing students may experience while at university, necessary education, counseling services, and protective measures should be provided to students.

Mental health nurses can determine the eating disorders that students in nursing departments may experience during their years at school, organize counseling services, receive training, and institute preventive measures. It is important that future research involves not only those affected by orthorexia, but also clinicians responsible for their care.



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GENİŞLETİLMİŞ ÖZET

ARAŞTIRMA / İNCELEME

Hemşirelik Öğrencilerinde Ortoreksiya Nervosa (ON) ve Beden İmajı İle İlişkisi

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Giriş

İlk kez 1997'de Bratman ve Knight tarafından tanımlanan ortoreksiya nevroza (ON) terimi, doğru beslenme takıntısı ile başlayan kısıtlayıcı bir diyet, yiyecek hazırlamaya odaklanma ve ritüelleştirilmiş beslenme biçimleri ile devam eden sağlıklı beslenme takıntısı olarak görülmektedir (Koven & Abry, 2015).

Ortoreksiya nevroza henüz DSM-V veya ICD 10 kriterlerinde yer almasa da tipik veya atipik yeme bozuklukları, obsesif-kompulsif bozukluk veya somatik semptom bozukluğu arasında örtüşen önemli semptomları bulunmaktadır (Brytek-Matera et al., 2017). Ortoreksiya nevroza görülme sıklığı gittikçe artan ve beslenme yetersizliği, sosyal ilişkilerin kaybı, yaşam kalitesinde bozulma ile sonuçlanan özellikle belirli meslek gruplarını daha yüksek düzeyde etkileyen beslenme davranışı takıntılarındandır (Duran, 2016). Risk grupları arasında kadınlar, adölesanlar, spor yapan bireyler, tıp öğrencileri, sağlık çalışanları, diyetisyenler, performans oyuncularını gibi beden imajına büyük önem veren gruplar vardır (Duran, 2016; Çiçekoğlu ve Tunçay, 2018).

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Beden imajı ile ilgili olarak, Ortoreksiya nervosa bireyleri kilo kaybıyla ilgilenmemeli ve Anoreksiya nervosa ve Bulimia nervosa hastalarına özgü olan negatif vücut imajı tutumlarını sergilememelidir (Brytek-Matera et al., 2018). Ancak ortoreksiya nervosanın vücut imajı endişelerini ve bozukluklarını gösteren birkaç çalışma mevcuttur. Literatürde beden imajının yeme bozuklukları ile ilişkili olduğu belirtilmiştir (Figueiredo, Simola-Ström, Isomaa, Weiderpass, 2019). Ortoreksiya nervosa ve yeme bozuklukları arasındaki benzerliklerden dolayı, yeme bozukluklarının başlangıcı ve bakımında rol oynadığı yaygın olarak kabul edilen faktörlerin, ortoreksiya nevrozda da etkisinin olabileceği belirtilmiştir. Fazla kilolar ile meşguliyet, görünüm oryantasyonu ve yeme bozukluğu geçmişinin varlığı ortoreksiyanın önemli belirleyicileri olarak tanımlanmıştır (Brytek-Matera et al., 2018) Ortoreksiya nervosa ve beden imajı ile ilişkisini belirleyen çok kısıtlı sayıda çalışmaya ulaşılmıştır. Ülkemizde ise hemşirelik öğrencilerinde ortoreksiya nervosa ile beden imajını bir arada ele alan çalışmaya rastlanmamıştır.

Bu nedenle ortoreksiya nervosa ve beden imajı ile ilişkisini risk altında olan hemşirelik öğrencilerinde çalışmanın önemli olduğu düşünülmektedir. Bu çalışma hemşirelik öğrencilerinde ortoreksiya nervosa riski ve beden imajı ile ilişkisini belirlemek amacıyla tanımlayıcı-kesitsel tipte yapılmıştır.

Metodoloji

Araştırmanın amacı kapsamında 312 hemşirelik öğrencisiyle çalışma yürütülmüştür. Araştırmacı tarafından hazırlanan anket formu, Orto-11 ölçeği ve Frost Çok Boyutlu Mükemmeliyetçilik Ölçeği katılımcılara uygulanmıştır. Frost Çok Boyutlu Mükemmeliyetçilik Ölçeğindeki alt boyutlar; görünüşü değerlendirme, görünüş yönelimi, fiziksel yeterliliği değerlendirme, fiziksel yeterlik yönelimi, sağlık değerlendirmesi, sağlık yönelimi ve beden alanlarından doyumdur. SPSS 21 Programı ile veriler analiz edilmiştir.

Tartışma

Hemşirelik öğrencilerinde ortoreksiya nevroza riski ve ortoreksiya nervosanın beden imajı ile ilişkisinin belirlendiği bu çalışmada öğrencilerin %24'ü ortoreksiya eğilimi göstermiş ve öğrencilerin ortoreksiya puanı 26.67 ± 3.70 olarak orta düzeyde saptanmıştır. Hemşirelik öğrencileriyle yapılan bir çalışmada öğrencilerin %45.3'ü ortoreksiya nevroza açısından risk altında bulunmuş ve öğrencilerin ortoreksiya nevroza puan ortalaması 27.34 ± 4.53 olarak belirlenmiştir (Arslantaş et al., 2017). Diyetisyenlik Bölümü öğrencileriyle yapılan başka bir çalışmada ortoreksiya eğilimi %68.2 oranında bulunmuştur (Grammatikopoulou et al., 2018). Plichta ve arkadaşları çalışmalarında sağlıklı ile ilgili ana dal öğrencilerinde ORTO-15 puanlarını sağlıklı ile ilgili olmayan ana dal öğrencilerinden anlamlı derecede düşük olarak saptamışlardır (Plichta et al., 2019).

Bu çalışmada ortoreksiya eğilimi olan öğrencilerin ortoreksiya eğilimi olmayanlara göre daha az düzenli fiziksel egzersiz yaptığı; daha az öğün atladığı ve daha az şişmanlama endişesine sahip olduğu belirlenmiştir. Literatürde ortoreksiya nervosada anoreksiya nervosadaki gibi öğün atlamanın bulunmadığı (Scarff, 2017); görünüşte vücut ağırlıklarına aldırış etmedikleri (Segura-Garcia et al., 2015) belirtilmiştir. Bu çalışmada da sağlıklı beslenme üzerine odaklanan bireylerde diğer yeme bozukluklarındaki gibi zayıf olma endişesi, öğün atlama ve düzenli fiziksel egzersiz yapma

davranışlarının görülmemesi olağandır. Roncero ve arkadaşları da benzer şekilde çalışmalarında ORTO11 ile düzenli fiziksel egzersiz yapma arasında istatistiksel açıdan anlamlı bir ilişki olmadığını belirlemiştir (Roncero et al., 2017).

Literatürde beden memnuniyetsizliği, çarpık beden imgesi algısı, diyet ve kilo verme öyküsü, sağlıksız kilo verme yöntemleri ve depresyon, anksiyete gibi zihinsel sağlık sorunları üniversite öğrencileri arasında bozuk yeme davranışı ile ilişkili bulunmuştur (Bundros et al., 2016). Varga ve Máté, daha fazla ortoreksiya nevroza özelliği mevcut olduğunda vücut imgesi bozukluklarının daha şiddetli olduğunu bildirmiştir. Bu çalışmada ortoreksik öğrencilerde Çok Yönlü Beden-Benlik İlişkileri Ölçeği Toplam Puanı nonortoreksik bireylere göre daha düşük düzeyde saptanmıştır. Bu sonuca göre ortoreksik bireylerde olumsuz beden algısı olduğu söylenebilir.

Bu çalışmada ORTO11 ölçeği ile Görünüş Yönelimi arasında pozitif yönde istatistiksel açıdan anlamlı bir ilişki vardır. Buna göre ortoreksiya puanı arttıkça görünüş yönelimi artmakta yani ortoreksiya eğilimi olan bireylerin görünüşlerine aldırış etmedikleri, iyi görünmek için çok fazla çaba sarf etmedikleri görülmektedir. Brytek-Matera ve arkadaşları da benzer şekilde çalışmalarında ORTO15 puanı ile Görünüş Yönelimi arasında ölçeği puan ortalaması arasında pozitif yönde istatistiksel açıdan anlamlı bir ilişki saptamışlardır (Brytek-Matere et al., 2016).

Bu çalışmada ORTO11 ile Sağlık Yönelimi ile Beden Alanlarında Doyum arasında negatif yönde istatistiksel açıdan anlamlı bir ilişki vardır. Yani ortoreksiya eğilimi arttıkça sağlık yönelimi ve beden alanlarında doyum artmaktadır. Bu çalışmaya benzer şekilde Brytek-Matera ve arkadaşları da ORTO15 puanı ile Sağlık Yönelimi ile Beden Alanlarında Doyum arasında negatif yönde istatistiksel açıdan anlamlı bir ilişki saptamışlardır (Brytek-Matere et al., 2016). Barnes ve arkadaşları ise bu bulgudan farklı olarak çalışmalarında ORTO puanı ile BAS arasında pozitif yönde istatistiksel açıdan anlamlı bir ilişki saptamışlardır (Barnes and Caltabiano, 2017). Ortoreksiya nervosanın sağlıklı beslenme sağlıklı olma üzerine aşırı takıntı durumu olması bireylerin sağlığa yönelim ve bunun sonucunda da beden alanlarından doyuma yol açtığı düşünülmektedir.

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