

Research Article

Dating Violence Among University Students: A Cross-Sectional Study from Eastern Turkey

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Abstract

Objectives: This study aimed to determine the prevalence of violence experienced in dating relationships among university students.

Methods: A cross-sectional study was conducted among girls at Atatürk University, a school with 18842 female students. The study data were collected using a self-administered questionnaire, including demographic questions and the Turkish version of the Revised Conflict Tactics Scales (CTS2).

Results: The mean (\pm SD) age of the students was 22.69 \pm 2.04 years. The CTS2 subscales showed negotiation in 135 (99.3%), psychological aggression in 128 (94.1%), physical assault in 120 (88.2%), sexual coercion in 26 (19.1%), and injury in 51 cases (37.5%). The odds of physical assault violence victimization was higher among smokers than non-smokers (OR=5.57, 95% CI=1.18, 26.23; $p=0.03$). Besides, alcohol users had higher odds compared to students who had never had a drink (OR=6.63, 95% CI=1.99, 22.08; $p=0.002$) or participants who had exposure to violence in childhood compared to those who had not (OR=4.31, 1.21, 15.31; $p=0.024$).

Conclusion: University students who smoke, use alcohol, and are exposed to childhood violence are more likely to report DV victimization. These risk patterns may serve as warning signs for the elevated risk for DV victimization and would be useful in identifying cases which could benefit from targeted, preventive interventions.

Keywords: Student health services, intimate partner violence, dating violence, sexual harassment

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Violence is recognized as a chief public health concern by the World Health Organization (WHO); it is widespread and causes many physical and mental diseases as well as deaths. According to the WHO, the typology of violence distinguishes four modes in which violence may be inflicted: “physical,” “sexual,” “psychological,” and “deprivation/neglect.” The general definition of violence is further divided into three sub-types according to the victim-perpetrator relationship as self-directed, interpersonal [e.g.,

dating violence (DV)], and collective.^[1] On the other side, the concept of DV is defined as; “Painful or hurtful all of the words, gestures, and behaviors including the use of physical or psychological force and threats against the partner in a dating relationship”^[2,3]

For young people, dating is one of the key stages of reaching adulthood. Unfortunately, at this stage, many find themselves experiencing violence in the offensive and victim roles of a dating relationship.^[4] Although dating vio-

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lence is seen in all ages, it is frequently concentrated during high school and university ages. In an international study conducted in thirty-one universities in sixteen countries, the rates of physical violence in dating relationships for 12 months were between 17% and 45%.^[5] In a study including university students in Turkey, the prevalence of dating violence was reported as 8.2%.^[6]

Victimization in a dating relationship may result in a range of negative health outcomes. For example, physical DV is associated with negative mental health outcomes, including disordered eating, depression, and suicide ideation.^[7-9] DV also is associated with increased participation in health risk behaviors, such as cigarette and alcohol consumption^[7,10] as well as binge drinking⁸, drug use^[11], and sexual risk behaviors such as early initiation of sexual intercourse, lack of condom use, and multiple sexual partners.^[8,11,12]

As a key public health principle, the first step in solving a problem is its definition and elaboration of the magnitude.^[13] Considering the health and safety risks resulting from violence, it is crucial to determine the prevalence and frequency of violence, the characteristics of victims and aggressors, to elucidate the reasons, and to develop protective programs. Although in limited number, there are studies about the extent of DV in Turkey. However, no study was conducted to investigate dating violence in Erzurum, a distinct city in terms of sociodemographic and sociocultural characteristics.

Objectives

This study aimed to determine the prevalence of violence experienced in dating relationships among Atatürk University students and to discuss the necessary measures to prevent and reduce its harms. The results of this study may serve as a guide for the establishment of social and legal regulations in Turkey.

Accordingly, two research questions were formulated: 1-What is the frequency of dating violence among university students from eastern Turkey? 2-Is there a relationship between sociodemographic characteristics of the students and the severity of dating violence?

Methods

Study Design

The study was conducted in a descriptive, cross-sectional plan, at the 15 schools of Atatürk University, between June and July 2018. Study reporting was done per the STROBE guidelines.^[14] The study protocol was approved by the Ethics Committee of Clinical Researches, Faculty of Medicine, Atatürk University (IRB number 2-26, Date 15.02.2018). Each participant signed an informed consent form following the Declaration of Helsinki.

Setting and Participants

Atatürk University (www.atauni.edu.tr) was established in 1957 in Eastern Turkey. At the time of research, there were around 20 thousand female students in formal education. The university had a research center for women problems. The research enrolled females, a population of 18842 students during the study period.^[15] A random sampling stratified according to the total number of students in each school was employed. The sample was selected using random numbers from the list obtained from the student affairs. Students were visited in their classrooms, and a total of 485 students were invited to the study. Sixty-three subjects rejected to join, and 39 were excluded due to insufficient or unreliable data (Fig. 1).

Variables

The data collection tool consisted of two parts. The primary outcome variable of the study was the Revised Conflict Tactics Scales (CTS2) score. The independent study variables were age (years), study grade (1st to 6th), place mostly lived (city/district/village), marital status (single/married), place of residence (dormitory/at home with family/at home with friend/other), perceived economic status of the family (poor/moderate/ good), smoking (never smoker/active smoker/ex-smoker), alcohol use (never drinker/once in a month/former alcohol consumer), family type (nuclear/extended/single-parent), parental education (not literate/literate/primary school graduate/junior high school graduate/high school graduate/graduated from a university), parental occupation (officer/worker/self-employed/housewife/retired/unemployed), dating status (no date/former date/current date), information about the dating partner, violence in childhood (yes/no), reaction to DV, reaction to the DV in the surrounding area, and behavior in case violence. Data were collected via self-administered questionnaires. Both the scale and the data collection sheet were applied during school days in an empty and silent classroom or in a comfortable place in the clerkship environment.

Bias

In the questionnaire, there was brief information about the research to ensure that the research data were obtained correctly, and participants were asked not to put their identities on the data collection form. Also, the integrity of the answers was checked by two researchers after entering into the computer.

Study size

The required sample size was calculated based on previously reported^[16] 14% expected violence prevalence. Given a finite population of 18842 students, an expected margin

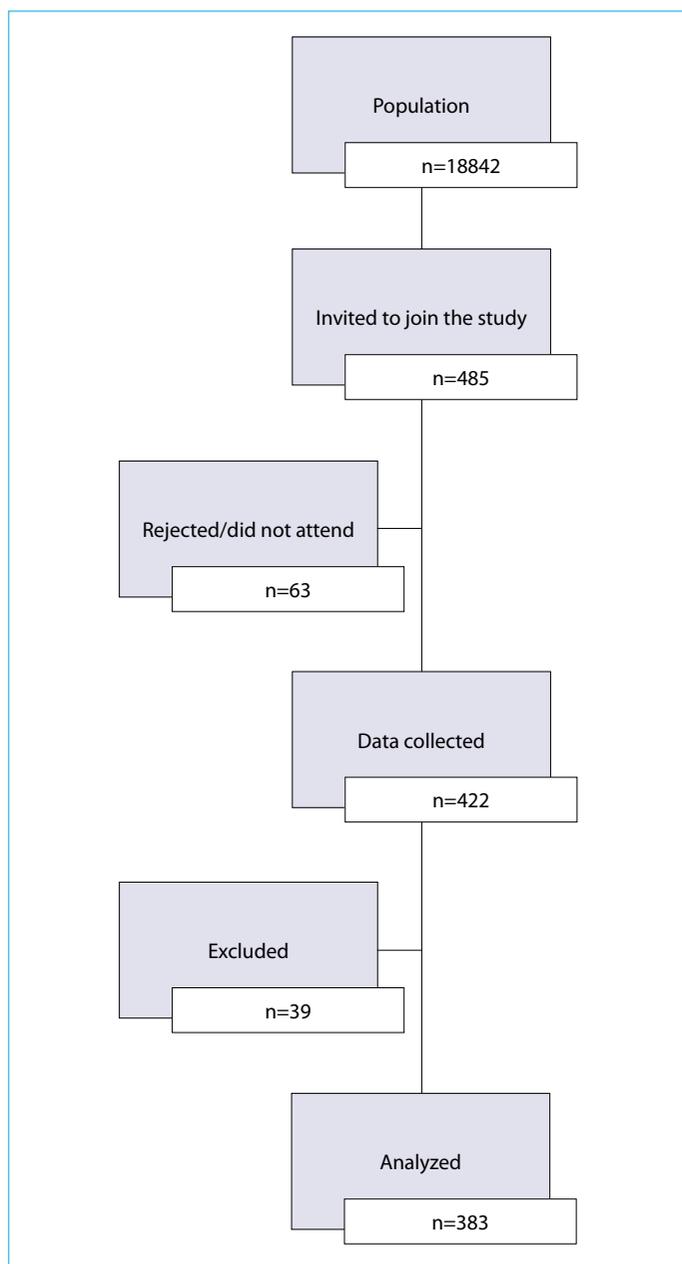


Figure 1. Study flow diagram.

of error of 3.5%, a sample size of 372 cases is required to estimate the CTS2 scores in the given population with a confidence interval of 95%.^[17] Considering non-responses, a larger sample size was targeted.

Quantitative Variables

DV violence victimization was assessed using the validated version^[18] of the Revised Conflict Tactics Scales (CTS2), initially developed in English.^[16] The CTS2 includes 39 behaviorally-specific statements constituting the following five subscales: Negotiation (6 items), psychological aggression (8 items), physical assault (12 items), sexual coercion (7 items), and injury (6 items). The CTS2 was used to assess

victimization in the last year, considering a current or former intimate partner. For each statement, participants indicated how frequently they have engaged in each behavior. Responses were scored on a 7-point scale ranging from 0 (never) to 6 (>20 times). The response option, "never" and "happened before, but not in the past year" was coded as "no," from 1 to 6 coded as "yes" to calculate the DV subscales prevalence. Prior researches show good construct, discriminant, and criterion validity, good internal reliability, and a valid and reliable factor structure for the CTS2 scales.^[16,18,19]

Statistical Analysis

Data was entered into the computer and analyzed using the SPSS 25.0 software (SPSS Inc., Chicago, IL, USA). Descriptive statistics were used to present students' sociodemographic information by summarizing in percentages for categorical variables and as mean±standard deviations (SD) for continuous variables. The relationship of the physical assault, sexual coercion, and injury sub-dimensions of the CTS2 with categorical variables was assessed with the Chi-Square test; variables with a $p < 0.2$ were entered into a logistic regression model. The risk factors affecting the physical assault, sexual coercion, and injury sub-dimensions of the CTS2 were evaluated with a logistic regression analysis using the enter method. Adjusted odds ratios (ORs) and 95% confidence intervals (CI) were calculated. Test reliability was estimated using Cronbach α . A p -value of < 0.05 was considered statistically significant.

Results

Participants

The study included 383 students. The mean (\pm SD) age of the participants was 22.69 ± 2.04 years. Most of the students were single, and the perceived economic status of the families was moderate. One-fifth of the students smoked, but most of them did not consume alcohol. The majority of the participants had nuclear family structures. On the other hand, the fathers of the participants were more educated compared to the mothers, and most of the mothers were housewives. Sociodemographic variables of the students are given in Table 1.

Descriptive Data

Cronbach's alpha internal consistency coefficient was calculated as 0.857 for all the CTS2 items. The mean (\pm SD) duration of dating for current and former dates was 1.91 ± 0.99 and 1.85 ± 1.23 , respectively. The mean (\pm SD) age at first dating experience and the age of the date were 17.07 ± 1.83 and 18.82 ± 3.15 years, respectively. Of the participants, 14.6% ($n=56$) had a current date, while 21.4% ($n=82$) had

Table 1. Sociodemographic characteristics of the participants

Variable	n	%
Study grade		
1 st grade	81	21.1
2 nd grade	104	27.2
3 rd grade	94	24.5
4 th grade	77	20.1
5 th grade and over*	27	7.1
Place most of life spent		
City	279	72.8
District	88	23.0
Village	16	4.2
Marital status		
Single	375	97.9
Married	8	2.1
Residency place		
Dormitory	171	44.7
At home with family	97	25.3
At home with friend(s)	90	23.5
Other	25	6.5
Perceived economic status of the family		
Poor	40	10.4
Moderate	324	84.6
Good	19	5.0
Smoking		
Never smoker	265	69.2
Active smoker	78	20.4
Ex-smoker	40	10.4
Alcohol consumption		
Never drinker	354	92.4
Once a month	21	5.5
Stopped drinking	7	1.8
Once a week	1	0.3
Family type		
Nuclear	260	67.9
Extended	116	30.3
Single parent	7	1.8
Mother's education		
Illiterate	19	5.0
Literate	32	8.3
Primary school graduate	184	48.0
Junior high school graduate	65	17.0
High school graduate	49	12.8
University degree	34	8.9
Father's education		
Illiterate	2	0.5
Literate	8	2.1
Primary school graduate	72	18.8
Junior high school graduate	91	23.8
High school graduate	119	31.1
University degree	91	23.7

Table 1. Cont.

Variable	n	%
Mother's occupation		
Housewife	287	74.9
Self-employed	32	8.4
Officer	25	6.5
Worker	24	6.3
Retired	15	3.9
Father's occupation		
Self-employed	113	29.5
Worker	113	29.5
Retired	74	19.3
Officer	73	19.1
Unemployed	10	2.6

*Most of the schools had four-year programs. Only medicine, dentistry, and pharmacy were >4 years.

a former date. Half of the dated partners had a high school education, and more than half were smokers. Most reasons for arguments with the dating partner were jealousy and not acting the way he wanted (Table 2).

Outcome Data

The CTS2 data showed high rates of DV during the last 12 months. Nearly all students showed negotiation and psychological aggression; physical assault was also common. Even one-fifth reported sexual coercion. Finally, 37.5% of the sample endorsed injuries resulting from DV (Table 3).

The association of risk behavior participation with victimization in a physically assault (controlling for smoking and dating), sexual coercion (controlling for residency place, alcohol, dating partner's smoking, dating partner's alcohol, and violence in childhood), and injury (controlling for grade, residency place, alcohol and father's occupation) in the violent dating relationship is reported in Table 4. Also, the odds of physical assault violence victimization was higher among smokers than nonsmokers (OR=5.57, 95% CI=1.18, 26.23; p=0.03). Besides, alcohol users had higher odds compared to students who had never had a drink (OR=6.63, 95% CI=1.99, 22.08; p=0.002) or participants who had exposure to violence in childhood compared to those who had not (OR=4.31, 1.21, 15.31; p=0.024). On the other hand, the odds of injury violence victimization were less among 3rd grade than 1st-grade students (OR=0.12, 95% CI=0.04, 0.37; p<0.001). No meaningful statistics could be calculated for the negotiation and psychological aggression scales because almost everyone reported at least one instance (see Table 3).

Table 2. Dating status of participant, dating partner's characteristics and attitudes and behaviors of participants about violence

Variable	n	%
Dating status		
No dating	245	64.0
Former date	82	21.4
Current date	56	14.6
Dating partner's education		
Middle School	10	7.2
High school	72	52.2
University	56	40.6
Dating partner's smoking		
Smoker	83	60.1
Non-smoker	47	34.1
Ex-smoker	8	5.8
Dating partner's alcohol use		
Never drinker	98	71.0
Once in a month	31	22.5
More than two times a week	2	1.4
Once a week	3	2.2
Stopped drinking	4	2.9
Most common reason for arguments with the dating partner		
Jealousy	85	62.0
Not acting the way he wanted	30	21.9
Clothing the way he didn't like	10	7.3
Not meeting sexual requests	3	2.2
Other	9	6.6
Violence in childhood		
No	350	91.6
Yes	32	8.4
To whom would you tell if subjected to violence?		
No one	177	46.2
Friend	149	38.9
Parents	38	9.9
Police	17	4.5
Other	2	0.5
What would you do in case of dating violence?		
I would end the relationship	235	61.4
I would sulk and wait for him to win me back	86	22.4
I would not react	34	8.9
I would report to officials	25	6.5
I would pay back	3	0.8
Reaction to the dating violence in the environment		
It's a private matter, they wouldn't interfere	224	58.5
They would interfere	80	20.9
They would report to the police	62	16.2
They would report to the media	11	2.9
Other	6	1.5

Table 2. Cont.

Variable	n	%
Do you know where to apply in case of DV		
Yes	357	93.2
No	26	6.8
Are you aware of the legislations protecting women from violence?		
Yes	71	18.5
No	312	81.5
Do you think that women subjected to violence in Turkey are sufficiently protected?		
Yes	9	2.3
No idea	72	18.8
No	302	78.9

Table 3. Prevalence of exposure to violence according to CTS2 subscales

Scales	Yes		No	
	n	%	n	%
Negotiation				
Overall	135	99.3	1	0.7
Emotional	134	98.5	2	1.5
Cognitive	134	98.5	2	1.5
Psychological aggression				
Overall	128	94.1	8	5.9
Minor	127	93.4	9	6.6
Severe	121	89.0	15	11.0
Physical assault				
Overall	120	88.2	16	11.8
Minor	41	30.1	95	69.9
Severe	114	83.8	22	16.2
Sexual coercion				
Overall	26	19.1	110	80.9
Minor	21	15.4	115	84.6
Severe	18	13.2	118	86.8
Injury				
Overall	51	37.5	85	62.5
Minor	50	36.8	86	63.2
Severe	6	4.4	130	95.6

Discussion

Key Results

Around one-third (36.0%) of the participants had a dating experience. As to the CTS2, the prevalence data showed high rates of DV during the 12 months. Nearly all of the study participants endorsed negotiation and psychological aggression. Physical assault was also common. Additionally, one-fifth reported sexual coercion. Finally, 37.50% of the sample

Table 4. Prevalence and adjusted odds ratios (OR) for dating violence victimization by selected demographic and risk behavior characteristics

CTS2 Scales	N	n	%	p*	OR 95% CI			p**
Physical assault								
Smoking								
Active smoker	51	49	96.08	0.050	5.57	1.18	26.23	0.030
Ex-smoker	13	12	92.31		2.63	0.31	22.52	0.378
Never smoker	72	59	81.94		1.00			0.077
Dating status								
Current date	56	46	82.14		1.00			
Former date	80	74	92.50	0.065	2.78	0.92	8.38	0.069
Sexual coercion								
Residency								
Dormitory	69	8	11.59	0.017				0.271
At home with family	25	4	16.00		1.77	0.42	7.40	0.433
At home with friend(s)	32	9	28.13		2.17	0.61	7.69	0.232
Other	10	5	50.00		5.32	0.94	30.27	0.059
Alcohol use								
Never drank	115	19	16.52	0.126	1.00			
Quit/drinks	21	7	33.33		1.67	0.41	6.77	0.471
Dating partner's smoking								
Active smoker	83	20	24.10	0.181	1.72	0.44	6.75	0.435
Ex-smoker	8	1	12.50		1.35	0.11	15.90	0.814
Never smoker	45	5	11.11		1.00			0.737
Dating partner's alcohol								
Never drank	96	8	8.33	<0.001	1.00			
Quit	4	1	25.00		5.88	0.48	72.65	0.168
Drinks	36	17	47.22		6.63	1.99	22.08	0.002
Violence in childhood								
Yes	22	10	45.45	0.002	4.31	1.21	15.31	0.024
No	114	16	14.04		1.00			
Injury								
Grade								
1 st grade	39	23	58.97	0.001	1.00			0.003
2 nd grade	41	15	36.59		0.41	0.15	1.08	0.072
3 rd grade	47	8	17.02		0.12	0.04	0.37	<0.001
4 th grade and over	8	4	50.00		0.47	0.09	2.36	0.358
Residency								
Dormitory	69	23	33.33	0.063	1.00			0.084
At home with family	25	6	24.00		0.59	0.18	1.95	0.387
At home with friend(s)	32	18	56.25		2.72	1.01	7.34	0.048
Other	10	4	40.00		2.73	0.53	14.12	0.231
Alcohol								
Never drank	115	46	40.00	0.159	4.34	1.15	16.37	0.030
Quit/drinks	21	5	23.81		1.00			
Father's occupation								
Worker	44	11	25.00	0.111	1.00			0.169
Officer	24	10	41.67		2.65	0.77	9.16	0.124
Retired	26	9	34.62		2.01	0.58	6.90	0.270
Self-employed	42	21	50.00		3.14	1.12	8.75	0.029

CI: Confidence interval. *Chi-Square. **Logistic regression.

mentioned injuries resulting from DV. Physical assault was associated with smoking. Factors affecting the sexual coercion were partner's drinking and exposure to violence during childhood. Factors affecting injury were, being 1st grade, not using alcohol, and fathers self-employment.

Interpretation

The socio-demographic features of the participants were similar to the general Turkish population regarding the high percentage of urban residents, moderate economic perceptions of the families, lower smoking rates among females compared to males, low rate of alcohol consumption, predominantly nuclear family type, fathers being more educated than mothers, and majority of mothers being housewives.

The first age of dating was 17 years for the participants and 18 years for their partners. According to a survey conducted in 1990, approximately 90% of males and 88% of females had their first dating experience by the age of 16.^[20] In traditional Turkish society, flirting was not well received. However, it can be said that this perspective has changed over time. Located in eastern Turkey, the people of Erzurum are known with their more conservative preferences. We assume that the lasting cultural exchanges with Western societies are also transforming conservatively known places in Turkey. Also, the age of the first date is observed to decrease over time.

Using CTS, Coker et al.^[21] studied the prevalence of partner violence by type among Mexican American college women aged 18 to 35 years. They reported that almost half (43.0%) of the women in the sample experienced some type of partner violence. Of the women who reported to have a dating partner in the past year, 12% were physically or sexually assaulted, 12.1% were stalked, and 9.1% were psychologically abused. In a sample of 200 university students, Luthra et al.^[22] evaluated violence in the dating relationship, and reported that the incidence of self-reported partner violence was 25% for women and 10% for men. On the other hand, Esquivel-Santoveña et al.^[9] stated that more females were victimized in physical violence (25%) than their male counterparts among Mexican University Students.

A strong association between alcohol consumption and DV has been reported in the literature since the early 1950s.^[23] Indeed, both perpetrators and victims of DV report higher levels of alcohol consumption than those not involved in violent dating relationships. In a study of DV predictors, O'Keefe found that both men and women were significantly more likely to perpetrate acts of violence against their dating partner if they were using alcohol or drugs.^[24] Also, research has shown that DV is associated with marijuana

use and the onset of drug use other than marijuana at an early age.^[25] Eaton et al.^[26] reported that nearly 9% of the students were experiencing DV victimization. Among females, DV victimization was associated with alcohol and marijuana use and ever having sexual intercourse. DV victimization also was associated with early initiation of alcohol use among female students.

Different studies from Turkey reported similar results with the literature and show that tobacco and alcohol use effecting the likelihood of exposure to DV.^[27,28]

In a review, Kaukinen^[29] reported that the significant findings associated with the risk of college DV were sex, exposure to violence during childhood, negative emotional states and mental health (particularly, anger, anxiety, and depression), substance use and abuse, and sexual risk-taking behavior. He also elaborated in the report that the victims likely have increased risk of academic disengagement, dropping classes, academic failure, and school withdrawal. Exposure to parental violence and a patriarchal culture was reported as a significant risk factor also by other researchers.^[12,30,31]

On the other hand, perceptions of the availability of social support may serve to buffer the relationship between victimization and psychological outcomes. Social support, as measured by parental attachments, the receipt of support from the family, and spirituality reduce the risk of DV victimization.^[29]

Beyond the reasons for dating violence, researchers also evaluated its consequences. It was demonstrated that dating violence victimization was the strongest predictor of subsequent suicidal ideation.^[32] Concerning suicidal ideation, DV had even a stronger effect compared to incest or other child abuse.

Limitations

This study has some limitations. First, only female students were included in the study, and no information was given about the opinions and violence experienced by males. The current study only assessed DV victimization. However, adolescents involved in DV can also be a perpetrator. We did not ask the participants any questions about "drug abuse". Also, the data are cross-sectional, and thus, the direction of causality cannot be determined. Besides, the current study only assessed past-year DV and, therefore, does not account for DV that may have occurred before this time. Finally, the data are self-reported; it is not possible to preclude associated bias.

Conclusion

The results of this study support previous findings that DV victimization is associated with a range of health risk behav-

iors among female students. In addition, the current study adds new information about the association of DV with other risk behavior characteristics, including the self-employment of the father's. Our results suggest that university students who smoke, use alcohol, and are exposed to childhood violence are more likely to report DV victimization. These specific risk behavior patterns should serve as warning signs for the elevated risk for DV victimization and would be useful in identifying young people who could benefit from targeted, preventive interventions. Faculty, academic advisors, and other college staff directly interacting with the students need to be educated on the prevalence and nature of college DV victimization. These educations should also include how to respond to reports of violence and how to guide students to pathways of resources and recovery.

Disclosures

Ethics Committee Approval: The study protocol was approved by the Ethics Committee of Clinical Researches, Faculty of Medicine, Ataturk University (IRB number 2-26, Date 15.02.2018).

Peer-review: Externally peer-reviewed.

Conflict of Interest: None declared.

Authorship Contributions: Concept – E.O.C.; Design – E.O.C.; Supervision – E.O.C.; Materials – E.O.C., E.B.Y., E.C.T.; Data collection &/or processing – E.O.C., E.B.Y., E.C.T.; Analysis and/or interpretation – E.O.C., E.B.Y.; Literature search – E.O.C., E.B.Y.; Writing – E.O.C., E.B.Y., E.C.T.; Critical review – E.O.C., E.B.Y., E.C.T.

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