

New Trends and Issues Proceedings on Advances in Pure and Applied Sciences



Issue 13 (2021) 035-045

www.propaas.eu

Selected paper of 5th International Congress of Nursing (ICON-2021), AAB University, Pristina, Kosovo.24-26 September, 2021 (ONLINE CONFERENCE)

Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use

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Suggested Citation:

Kaya, G. & Koc, Z. (2021). Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*. [Online]. *0*(13), 035–045. Available from: www.propass.eu

Received from September 30,2021; revised from November 22,2021; accepted from December 22,2021. Selection and peer review under responsibility of Prof. Dr. Dogan Ibrahim, Near East University, Cyprus. ©2021 Birlesik Dunya Yenilik Arastirma ve Yayincilik Merkezi. All rights reserved.

Abstract

This study was planned to determine the factors affecting the stigmatising tendencies of university students studying in health-related departments towards alcohol and substance use. This research was carried out with the participation of 212 students who were willing to participate in the study between 22.04.2021 and 29.04.2021 at the Health Services Vocational School and Faculty of Health Sciences. The data in the study were collected by using a questionnaire consisting of 38 questions about the sociodemographic characteristics of the students and alcohol substance use, the Yedam Alcohol Dependence Stigmatisation Scale and the Yedam Drug Dependence Stigmatisation Scale. Percentage calculation, Kolmogorov–Smirnov, Pearson's correlation coefficient, t-test, analysis of variance, Tukey's test and Cronbach's alpha coefficient were used to evaluate the data. It was observed that the scores of Yedam Alcohol Dependence Stigmatisation Scale and Yedam Substance Dependence Stigmatisation Scale differed according to some characteristics of the students (p < 0.05).

Keywords: Alcohol, dependence, stigmatisation, student, substance.

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1. Introduction

As in the whole world, stigmatisation towards alcohol and substance use is one of the important social problems in our country. Individuals who use alcohol and substance are exposed to stigma due to a large number of factors. The framework of stigmatisation is also expending with the increasing prevalence of alcohol and substance use. Different attitudes and behaviours are shown in the society towards individuals with alcohol and substance use disorder. The most common of these attitudes is stigmatisation. As a result of discrediting and devaluing individuals due to the perception that they are different from the norms of the society, stigmatised individuals are isolated (Goffman, 2014).

Stigma towards individuals who use alcohol implies they have characteristics such as being aggressive, dangerous and irresponsible. Stigma can be quite wearisome for the addicted individual. In alcohol dependence, once stigmatisation takes place, it becomes permanent for the individual and the individual experiences problems in many areas due to stigma. Stigma can result in loss of role status, deterioration in interpersonal communication and interaction, workplace isolation and social isolation in terms of the individual [14]. One of the most heavily stigmatised patient groups are those with alcohol and substance use disorder in the healthcare delivery system. It is seen that the process which starts with non-compliance to care and treatment due to stigma results in treatment rejection [3]. Feelings of guilt and shame due to alcohol and substance use disorder get ahead of the treatment and cause individual and social consequences. Stigmatised individuals do not want to apply to the healthcare delivery system and stigma creates an obstacle to treatment and rehabilitation services [10]. Although they are psychiatric disorders, alcohol and substance dependence are considered separate from other psychiatric disorders and individuals are more stigmatised. The reason for this is the fact that alcohol and substance use is perceived as a personal choice rather than a medical problem. The perception of harm due to alcohol and substance use that increases the tendency for violence and crime in individuals working in the healthcare delivery system forms the basis of stigma for alcohol and substance use [2].

Stigma makes it difficult for the individual to accept the disease, care and treatment. Individuals who apply to the healthcare delivery system for treatment are in interaction with healthcare professionals at every stage. For this reason, students who are studying in health-related departments and who will have a role in the healthcare delivery system in the future should be able to analyse the emotions of individuals with alcohol and substance use disorder well. Therefore, in order to identify the stigmatisation tendencies of students towards alcohol and substance use and the factors affecting these and also to develop appropriate strategies in line with the results found, studies and also results and information obtained from these studies are required which show the differences between student groups studying in faculties, schools and health services vocational schools providing education in the field of health. It is thought that the results obtained from the present study will contribute to developing educational activities and strategies to prevent stigma while creating the curricula of associate and undergraduate education and the content of departments and programmes.

1.1. Objective of the study

The study was planned as a descriptive and cross-sectional study to identify the stigma tendencies towards alcohol and substance use in students studying at the Health Services Vocational School and Health Sciences Faculty of a university and the factors affecting their stigma tendencies. Answers were sought to the following questions in this study:

- What is the level of alcohol dependence and substance dependence stigmatisation of students studying in health-related departments?
- What are the sociodemographic characteristics and alcohol and substance use characteristics that affect students' alcohol dependence and substance dependence stigmatisation?

2. Material and methods

2.1. Place and time of the research

This descriptive and cross-sectional study was carried out between 22.04.2021 and 29.04.2021 with university students studying at the Health Services Vocational School and Health Sciences Faculty of a university.

2.2. Population and sample of the research

The study was carried out on the relevant dates with the participation of 212 students studying at the Health Services Vocational School and Health Sciences Faculty of a university. Students who volunteered to participate were included in the study. The dependent variable of the study was alcohol dependence and substance dependence stigmatisation levels of students. The independent variables of the study were sociodemographic and alcohol and substance use characteristics of the students.

2.3. Data collection tools

In the study, the data were collected with a questionnaire form including 38 questions about the sociodemographic characteristics of the students and alcohol and substance use, Yedam Alcohol Dependence Stigmatisation Scale and Yedam Drug Dependence Stigmatisation Scale. The questionnaire form was developed by the researcher by examining the literature on the subject. The questionnaire form includes a total of 38 questions on students' sociodemographic (age, gender, school, department, parents' educational status and profession, marital status, socioeconomic status, family type, residential area and the state of having any health problems) and alcohol and substance use characteristics (the state of using alcohol or substance and frequency of use if the answer is yes; the state of having a disease and which diseases if the answer is yes; the state of having family members using alcohol or substance; the reason/s for starting alcohol or substance use; the state of having sufficient information about alcohol or substance use, which sources the information was obtained from if the answer is yes; inclusion of alcohol and substance use in the education curriculum; the state of stigmatising individuals who use alcohol and substance; the state of making friends with individuals who use alcohol and substance and the factor/s affecting students' stigmatisation tendencies for alcohol and substance use).

2.3.1. Yedam Alcohol Dependence Stigmatisation Scale

The Yedam Alcohol Dependence Stigmatisation Scale was developed by Dinc et al. [5]. The scale has 12 items and 3 factors as moral labelling, social discrimination and attitude towards personality. The responses were formed as a 4-point Likert-type score ranging between 0 and 3. The response scales are 'Strongly agree (3)', 'Agree (2)', 'Disagree (1)' and 'Strongly disagree (0)'. In the scale, the items 'I can live with a person who has alcohol dependence', 'I can live work a person who has alcohol dependence', 'Alcohol dependence is an illness' and 'Alcohol dependence can be cured' were reversely coded. The score ranges between 0 and 36 and the high score from the scale showed a high alcohol dependency stigmatisation level.

2.3.2. Yedam Drug Dependence Stigmatisation Scale

The Yedam Drug Dependence Stigmatisation Scale was developed by Dinc et al. [5]. The scale has 12 items and 3 factors as moral labelling, treatment evaluation and illness. The responses were formed as a 4-point Likert-type score ranging between 0 and 3. The response scales are 'Strongly agree (3)', 'Agree (2)', 'Disagree (1)' and 'Strongly disagree (0)'. In the scale, the items 'I can live with a person who has drug dependence', 'I can live work a person who has drug dependence', 'Drug dependence is an illness' and 'Drug dependence can be cured' were reversely coded. The score ranges between 0 and 36 and high score from the scale showed a high drug dependency stigmatisation level.

2.4. Data collection

The ethical standards of the Declaration of Helsinki were complied with in this study. Permission to use the Yedam Alcohol Dependence Stigmatisation Scale and the Yedam Drug Dependence Stigmatisation Scale was taken through email. The data were collected by the researchers and informed consents were obtained from the students. After the students who participated in the study were explained about the study, they were given the questionnaire form, Yedam Alcohol Dependence Stigmatisation Scale and Yedam Drug Dependence Stigmatisation Scale. The students were told that the decision to participate in the study was entirely up to them, they would not write their names on the questionnaires and the data collected in the study would be used only within the scope of the study. Data collection process was completed in about a week.

2.5. Data analysis

Statistical analyses of the students in the study were made by using SPSS 26 package programme in computer environment. One-way analysis of variance, t-test and Tukey's test were used for the analysis of the data that were normally distributed. The results were presented as frequency, percentage, mean and standard deviation. The significance level was considered as p < 0.05.

3. Results

A total of 212 students participated in this study. It was found that 76.9% of the participants were female, 23.1% were male, 59.4% were students in Faculty of Health Sciences, 32.5% were nursing students, 66.0% were in their fourth year, 49.5% were Anatolian High School graduates, mothers of 39.2% were primary school graduates, fathers of 30.2% were secondary school graduates, mothers of 74.5% were housewives, fathers of 30.2% were workers, 74.5% had nuclear family, 31.1% had democratic family structure, the residential area where 39.6% lived the longest was city centre, 65.1% were currently staying in a dormitory, 48,6% had an income equal to expense, 89.6% did not have health problems, 72.2% shared with members of the family when they had problems and the mean age was found as 21.6 \pm 1.6 years (Table 1).

Table 1. Distribution of sociodemographic characteristics of students (N = 212)

Characteristic	n	%
Age (mean+ SD = 21.64 ± 1.65)		
19–21 years	102	48.1
22 years and older	110	51.9
Gender		
Female	163	76.9
Male	49	23.1
Marital status		
Married	0	0.0
Single	212	100.0
Attended school		

Kaya, G. & Koc, Z. (XXXX). Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*. [Online]. *0*(13), 035-045.

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Vocational School of Health Services	86	40.6
Faculty of Health Sciences	126	59.4
Department		
First and emergency aid	31	14.6
Anaesthesia	33	15.6
Medical scanning/imaging	22	10.4
Nursing	69	32.5
Midwifery	57	26.9
Grade level		
Second class	72	34.0
Fourth class	140	66.0
Graduated high school		
Anatolian high school	105	49.5
Multi-programming Anatolian high school	14	6.6
Vocational and technical Anatolian high school	91	42.9
Foreign language high school	2	0.9
Mother education level		
İlliterate	20	9.4
Literate	10	4.7
Primary school	83	39.2
Secondary school	37	17.5
High School	40	18.9
University	22	10.4
Mother's profession		-
Housewife	158	74.5
Government employee	22	10.4
Retired	13	6.1
		_
Worker	16	7.5
Deceased	3	1.4
Father's education level		
Literate	22	10.4
Primary school	52	24.5
Secondary school	64	30.2
High school	55	25.9
University	19	9.0
Father's profession		
Government employee	27	12.7
Retired	48	22.6
Worker	64	30.2
Farmer	28	13.2
Self-employment	35	16.5
Unemployed	3	1.4
Deceased	7	3.3
Type of family		
Extended family	54	25.5
Nuclear family	158	74.5
Structure of family		
Democratic family	66	31.1
Oppressive and Authoritarian Family	36	17.0
Overprotective Family	50	23.6
Overly Tolerant Family	46	21.7
•		

Kaya, G. & Koc, Z. (XXXX). Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*. [Online]. *0*(13), 035-045.

Perfectionist Family	10	4.7
Unrelated Family	4	1.9
The residential area where lived		
Province	84	39.6
District	82	38.7
Village	46	21.7
Family incomes status		
Income less than expenses	62	29.2
Income Equal to expenses	103	48.6
Income more than expenses	47	22.2
Current place staying		
At home with family	25	11.8
Alone at home	19	9.0
At home with friends	30	14.2
Dormitory	138	65.1
The state of having a health problem		
Yes	22	10.4
No	190	89.6

It was also found that 84.0% of the students were not smoking, 86.3% were not using alcohol, none of the students were using drugs, 73.1% did not have a history of alcohol and substance use in the family, 58.5% stated curiosity as the reason to start using alcohol and substance, 94.8% stated that they had sufficient knowledge about alcohol and substance use, 59.7% stated that their source of information about alcohol and substance use was the education they received, 92.9% stated that the topic of alcohol and substance use was included in the education they received, 97.2% stated that they did not stigmatise individuals using alcohol and substance use, 92.9% made friends with individuals who were smoking, 63.2% did not make friends with individuals who were using substance, friends of 56.1% did not stigmatise individuals who were using alcohol and substance and 41.0% answered the question of factors that affected the tendency to stigmatise as personal prejudices, while 39.2% answered as having insufficient or incorrect information about alcohol and substance use and 35.4% answered as being affected by the behaviours and attitudes of their student friends (Table 2).

Table 2. Distribution of characteristics related to cigarette and alcohol dependence

Characteristic	n	%
Smoking		
Yes	34	16.0
No	178	84.0
Smoking period ($n = 34$) (mean = 3.35 ± 1.889)		
1–3 years	18	52.9
4 years and above	16	47.1
Smoking amount ($n = 34$) (mean = 7.71 ± 3.746)		
1–9 per day	23	67.6
10 or more per day	11	32.4
Alcohol using		
Yes	29	13.7
No	183	86.3
Alcohol using time ($n = 29$) (mean = 3.97 ± 1.955)		
1–3 years	13	44.8
4 years and above	16	55.2
Alcohol using amount (n=29)		

Kaya, G. & Koc, Z. (XXXX). Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*. [Online]. *0*(13), 035-045.

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1–2 per week	5	17.2
1–2 per month	24	82.8
Substance using		
Yes	0	0.0
No	212	100.0
Alcohol-substance use in family members		
Yes	57	26.9
No	155	73.1
^a A person who uses alcohol and substance in family members ($n = 57$)		
Mother	13	22.8
Father	35	61.4
Sibling	38	66.7
^a Substance used by family members (<i>n</i> = 57)	- 7	100.0
Cigarette	57	100.0
Alcohol	28	49.1 0.0
Drug **Reason for starting alcohol/substance use	0	0.0
aReason for starting alcohol/substance use	60	22.5
Family members using	69 124	32.5 58.5
Curiosity Show	68	32.1
Circle of friends	114	53.8
Stress	85	40.1
3(1655	25	11.8
Having adequate knowledge alcohol and drug use	23	11.0
Yes	201	94.8
No	11	5.2
^a Source of information on alcohol and substance use (<i>n</i> = 201)	11	5.2
Family	81	40.3
Friends	32	15.9
Alcohol substance addicted	14	7.0
Health personnel	64	31.8
Education	120	59.7
Congress/Symposium	27	13.4
Media	12	6.0
Social media	32	15.9
Including the subject of alcohol and substance use during education		
Yes	197	92.9
No	15	7.1
Making friends with alcohol users		
Yes	186	87.7
No	26	12.3
Making friends with substance users		
Yes	78	36.8
No	134	63.2
Stigmatising individuals using alcohol and substance by student friends		
Yes	93	43.9
No	119	56.1
^a Factors affecting the stigma tendency for alcohol and substance use		
Having insufficient inaccurate information about alcohol and substance use	83	39.2
Being influenced by student friends behaviours and attitudes	75	35.4
Behaviours and attitudes of other people	55	25.9

Kaya, G. & Koc, Z. (XXXX). Identification of the factors affecting the stigmatisation tendencies of university students in health-related departments towards alcohol and substance use. *New Trends and Issues Proceedings on Advances in Pure and Applied Sciences*. [Online]. *0*(13), 035-045.

Personnel prejudices	87	41.0
Familiar prejudices	52	24.5
Social prejudices	59	27.8
Education	32	15.1
Cultural values	62	29.2
Social media	12	5.7
Media	3	1.4

^aMultiple answers given.

Students' mean Yedam Alcohol Dependence Stigmatisation Scale score was found as 17.3 \pm 5.6, while their mean Yedam Drug Dependence Stigmatisation Scale score was found as 20.5 \pm 5.0 (Table 3).

Table 3. Descriptive statics for YEDAM Alcohol Dependence Stigmatisation Scale and YEDAM Drug

Dependence Stigmatisation Scale

YADSS and YDDSS Scale total score averages	Mean	SD	Min.	Max
Yedam Alcohol Dependence Stigmatisation Scale	17.33	5.696	4	29
Yedam Drug Dependence Stigmatisation Scale	20.52	5.012	5	30

It was found that Yedam Alcohol Dependence Stigmatisation Scale and Yedam Drug Dependence Stigmatisation Scale scores differed in terms of some of their characteristics; it was found that Yedam Alcohol Dependence Stigmatisation Scale total score (t = -3.514, p = 0.001) and Yedam Drug Dependence Stigmatisation Scale total score (t = -3.883, p < 0.001) of the students who were not using alcohol were found to be higher than those of the students who were using alcohol, while Yedam Drug Dependence Stigmatisation Scale total score of the students who were not smoking were found to be higher than those of students who were smoking (t = -2.248, p = 0.026) (Table 4).

Table 4. Examining the differences in scale scores according to smoking and alcohol use

Cools seems by smaling and alsohol use	YADSS	YDDSS	
Scale scores by smoking and alcohol use	Mean ± SD	Mean ± SD	
Smoking			
Yes	16.41 ± 6.495	18.77 ± 6.382	
No	17.51 ± 5.534	20.85 ± 4.653	
t; p	-1.026; 0.306	-2.248; 0.026*	
Alcohol use			
Yes	13.97 ± 5.710	16.45 ± 6.294	
No	17.86 ± 5.524	21.16 ± 4.469	
t; p	-3.514; 0.001**	-3.883; 0.000***	

t: Independent sample t-test.

4. Discussion

In this study, which was conducted to find out the factors that affected the stigmatisation tendencies of students studying in health-related departments towards alcohol and substance use, it was found that students had moderate alcohol and substance dependence stigmatisation. It was found that students who participated in the study had low cigarette and alcohol use rates; none of the students were using drugs; the students had sufficient information about alcohol and substance use; alcohol and substance use was included in their education; the students listed their reasons for starting to use alcohol and substance as curiosity (58.5%), friend circle, stress, the presence of family members who used alcohol and substance, showing off and aspiring in the social environment; and

^{*}p < 0.05; **p < 0.01: ***p < 0.001.

although students were friends with individuals who used cigarette and alcohol, they did not make friends with individuals who used drugs (63.2%).

In parallel with the results of the study, in a study conducted by Yilmaz (2020) to find out university students' attitudes and stigmatisation tendencies towards alcohol and substance use, it was found that the reason why more than half of the students (54.4%) started using alcohol and substance was 'curiosity'. In a study conducted by Asik et al. (2018) to find out the stigmatising attitudes of students studying at health sciences faculty about substance use, the reasons for starting alcohol use were reported as friend circle (50.0%) and curiosity (21.4%), while the reasons for starting smoking were reported as friend circle (41.7%) and curiosity (25.0%). In a study conducted by Saracli [12], the reasons why students smoked were found as curiosity (50.8%), whim, aspiring, sadness and fun, respectively. It is thought that curiosity and friend circle, which are among the reasons to start using alcohol and substance, can also affect stigmatisation tendency towards alcohol and substance use.

The Yedam Alcohol Dependence Stigmatisation Scale mean score was found as 17.33 \pm 5.69 and Yedam Drug Dependence Stigmatisation Scale mean score was found as 20.52 \pm 5.01. In a study conducted with 118 individuals working in private schools and private companies, the Yedam Alcohol Dependence Stigmatisation Scale mean score was reported as 23.19 \pm 4.71 and the Yedam Drug Dependence Stigmatisation Scale mean score was reported as 24.79 \pm 4.60 [5]. The Yedam Alcohol Dependence Stigmatisation Scale mean scores and the Yedam Drug Dependence Stigmatisation Scale mean scores were found to differ in studies conducted and it is thought that these differences may be due to the sociodemographic characteristics of samples and alcohol and substance use characteristics.

In the present study, it was found that the Yedam Alcohol Dependence Stigmatisation Scale total scores and the Yedam Drug Dependence Stigmatisation Scale total scores were found to differ in terms of students' sociodemographic and alcohol and substance use characteristics; it was also found that students who were 22 years of age and older, students whose parents' educational levels were low and those who had overprotective family structure had high Yedam Alcohol Dependence Stigmatisation Scale and Yedam Drug Dependence Stigmatisation Scale total scores. It was found that students who did not use alcohol had a higher Yedam Alcohol Dependence Stigmatisation Scale total score than the students who used alcohol, while the students who did not smoke and use alcohol had a higher Yedam Drug Dependence Stigmatisation Scale total score than the students who smoked and used alcohol.

In parallel with the results of the study, it was reported that cigarette and alcohol use affected stigmatisation tendency towards alcohol and substance use and stigmatising attitude in a study conducted by Kayli et al. [11]; department/faculty, cigarette, alcohol and substance use and characteristics and parents' educational level affected stigmatisation tendency towards alcohol and substance use and stigmatising attitude in a study by Gargari [8] and age and level of education affected stigmatisation tendency towards alcohol and substance use and stigmatising attitude in a study by Evans and Broadus [7]. Unlike the study findings, in a study by Gargari [8] with students studying at different departments of a university, it was reported that income and expense level and mother's educational level did not affect stigmatising attitude towards alcohol and substance dependence.

In a study conducted by Kaya [9] to find out the stigma and attitudes of university students towards alcohol and substance use, it was reported that university students had high stigmatising attitudes towards individuals who used alcohol and substance. Similarly, it was reported in Demiroren et al.'s [4] study that medical faculty students did not stigmatise patients with alcohol and substance dependence more than schizophrenia and depression patients. In Asik et al. 's (2018) study, it was found that students had low stigmatising attitudes towards individuals who used substance. While students' stigmatisation tendencies towards alcohol and substance use and the factors affecting these differed in terms of the studies conducted, it is thought that this situation may be resulting from students' individual and alcohol and substance use characteristics; familial, social and cultural factors; their awareness levels and their departments.

When the literature is reviewed, it can be seen in studies conducted with students studying in health-related departments that students' attitudes and behaviours were similar to the behaviours of the society, and sociodemographic characteristics, familial, social and cultural factors were effective in stigma. In this direction, it is thought that increasing students' professional knowledge and skills, prolonging the period of professional practices and providing students' active participation in practices will decrease students' tendencies for stigmatisation in the period before graduation and develop students' awareness about stigmatising individuals who use alcohol and substance and enable them to develop positive attitudes about stigmatisation [13].

5. Conclusion

In this study, it was found that students had moderate Yedam Alcohol Dependence Stigmatisation Scale and Yedam Drug Dependence Stigmatisation Scale scores. In line with the results obtained, it is recommended to organise recurring and comprehensive training and education activities and to develop goal action plans to increase the knowledge, skills and awareness of students studying in health-related departments about stigmatising individuals who use alcohol and substance. It is also recommended to increase the number of scientific studies examining students' tendencies of stigmatising individuals with alcohol and substance use disorder and the factors affecting their tendencies, and to enable students to participate actively in activities carried out for preventing stigmatisation.

6. Limitations of the research

As a result of different data collection tools and sample groups in studies examining stigmatisation tendencies towards alcohol and substance use and the factors affecting these, it was getting harder to make comparisons. In this study, problems were experienced due to differences in sample and the data collection tools while making comparisons with other studies in which university sample was chosen. Due to the COVID-19 pandemic, the questionnaire forms were applied face-to-face only to Health Sciences Faculty of midwifery and nursing department fourth-year students and Health Services Vocational School first and emergency aid programme, anaesthesia programme and medical imaging techniques programme second-year students. This is another limitation of the study.

Acknowledgment

The authors would like to thank the students who provided support by participating in the study.

References

- [1] S. Albayrak, "Substance use characteristics and attitudes of students studying at the faculty of public health," STED, vol. 27, no. 6, pp. 415--420, 2018. [Online]. Available: https://dergipark.org.tr/en/pub/sted/issue/42685/514712
- [2] P. W. Corrigan and J. R. Shapiro, "Measuring the impact of programs that challenge the public stigma of mental illness," *Clin. Psychol. Rev.*, vol. 30, pp. 907--922, Dec. 2010, doi: 10.1016/j.cpr.2010.06.004.
- [3] O. Cam and D. A. Dagli, "Quilt, shame and internalized stigmatization in alcohol addicts," *J. Dependence*, vol. 18, pp. 145--151, 2017. [Online]. Available: https://dergipark.org.tr/en/pub/bagimli/issue/35459/389962
- [4] M. Demiroren et al., "Educational needs assessment of stigmatization towards mental illness in medical education: Qualitative and quantitative approach," *Anatolian J. Psychiatry*, vol. 16, no. 1, pp. 22--29, 2015, doi: 10.5455/apd.45731.

- [5] M. Dinc et al., "Yedam alcohol dependence stygmatization scale," *Cyprus Turkish J. Psychiatry Psychol.*, vol. 1, pp. 33--35, 2019, doi:10.35365/ctjpp.19.special1.9.
- [6] M. Dinc et al., "Yedam drug dependence stygmatization scale," *Cyprus Turkish J. Psychiatry Psychol.*, vol. 1, pp. 9--11, 2019, doi:10.35365/ctjpp.19.special1.2.
- [7] W. P. Evans and A. D. Broadus, "Developing the public attitudes about addiction instrument," *Addiction Res. Theory*, vol. 23, no. 2, pp. 115--130, 2015. doi: 10.3109/16066359.2014.942296.
- [8] S. G. Gargari, "Drug and alcohol stigmatization of students from three different faculties at Dokuz Eylul University," Ph.D. dissertation, Inst. Health Sci., Dokuz Eylul Univ., Izmir, Turkey, 2015. [Online]. Available: https://tez.yok.gov.tr/UlusalTezMerkezi/
- [9] M. Y. Kaya, "Attitudes and stigmatization of university students towards alcohol and substancee abuse," Ph.D. dissertation, Zonguldak Bulent Ecevit Univ., Zonguldak, Turkey, 2020. [Online]. Available: https://tez.yok.gov.tr/UlusalTezMerkezi/