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Profile of Drivers Whose Licences Were Temporarily Revoked for Driving under the Influence of Alcohol for the Second Time in the Province of Türkiye and Participated in Training: A Retrospective Study

Türkan Üstündağ [1] & Arzu Akcan [2]

[1] Antalya Provincial Health Directorate, Antalya, Türkiye
[2] Associate Professor, Akdeniz University, Faculty of Nursing, Department of Public Health Nursing, Antalya, Türkiye

Abstract

Objective: This study aimed to determine the 2019 profile of drivers in a province in the south of Turkey who were detected by security forces while driving under the influence of alcohol for the second time, whose licences were confiscated for two years, and who were required to attend driver behaviour development training (DBDT) to get their licences back.

Materials and Methods: This retrospective registry study's sample consisted of 601 people. The recorded data used by the Antalya Provincial Health Directorate were evaluated. The ethics committee and institutional permission were obtained for the study. Categorical data were given with percentages, and continuous data were given with mean, standard deviation, maximum and minimum values.

Results: The average age of the drivers was 41.47±10.46, 98% were male, 32.9% were high school graduates, 65.9% lived in the city centre, and 88.5% were employed. It was determined that 40.8% of the participants had accidents involving property damage while driving under the influence of alcohol, and 43.1% of them consumed alcohol several times a week. Among the reasons for drivers' drinking, socialisation (9.94±4.64) had the highest mean score. It was determined that 31.8% of the participants exhibited harmful alcohol use behaviour, and 48.6% had a 75% alcohol use disorder.

Conclusion: This study revealed that the majority of drivers whose driver's licence was temporarily revoked for the second time due to alcohol-impaired driving were middle-aged, male, and employed; a significant proportion of them consumed alcohol frequently, were involved in accidents with property damage, and had a high risk of alcohol use disorder. The data emphasise the importance of developing targeted education and intervention programmes for this risk group.

Keywords Driving under the influence · retrospective studies · alcohol drinking · accidents · public health

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Corresponding author: Arzu Akcan aarzu@akdeniz.edu.tr

INTRODUCTION

Road traffic accident-related injuries are a significant public health problem and are among the leading causes of mortality worldwide (1, 2). Approximately 1.3 million people lose their lives and 20-50 million people are injured each year due to traffic accidents in the World, and the rate of sequelae in injuries is high (3). It is estimated that 1.35 million people died in road traffic accidents worldwide in 2016, and 5%–35% of all road deaths were alcohol-related (4).

The World Health Organisation states that drinking and driving are among the risk factors for traffic accidents (3). In other words, driving while under the influence of alcohol, psychoactive substances or drugs is one of the behaviours that disrupt safety and negatively affect order in the traffic environment (5). In the United States in 2019, drink-driving deaths accounted for 28% of all traffic deaths (6). Alcohol is an important cause of traffic accidents, and these accidents cause increased injuries, economic damage, mortality and morbidity (7). In fatal accidents that occur in high-income countries, approximately 20% of drivers have very high blood alcohol levels, while in middle- and low-income countries it is around 69% (8, 9). Alcohol-related traffic accidents account for 45%, 40% and 35% of all traffic accidents in Northern, Central and Southern Europe, respectively. In Turkey, 1802 of the 235,176 faults that caused fatal or injury accidents in 2022 were due to drink-driving (10). However, the fact that the rate of drink-driving in fatal or injury accidents is not very high does not eliminate the idea that this is a great risk. A study conducted with professional drivers in Turkey determined that 63.3% of drivers had consumed alcohol and 11.1% had received a traffic ticket for drink-driving at least once in their lifetime (5).

It has been observed that people who drive under the influence of alcohol tend to repeat this behaviour and are prone to committing crimes (11). It is observed that people who drink and drive cannot change their behaviour even though they experience that this behaviour is harmful (12). Drinking and driving is a remarkable issue and measures should be taken against it. In fact, halving road traffic deaths and injuries by 2030 is among the United Nations Sustainable Development Goals (13). According to Article 48 of the Highway Traffic Law No. 2918 in Turkey, drivers under the influence of drugs, stimulants or alcohol are prohibited from driving. The alcohol limit for private car drivers is 0.50 per mille and 0.21 per mille for other vehicle drivers. If these limits are exceeded, a fine is imposed for the first violation, and the driver's licence is suspended for six months. If it is violated a second time within five years, a fine is imposed and the driver's licence is suspended for two years. If it is violated three or more times, a fine is imposed each time, and the driver's licence is suspended for five years (14). The purpose of the article in question is to prevent drivers who have consumed alcohol or drugs from driving, to take the necessary precautions, and to ensure that legal sanctions are imposed on those who do not comply with this prohibition (15). In addition, according to the same article of this law, drivers whose licences are confiscated for driving under the influence of alcohol for the second time in the last five years are subject to training to improve driver behaviour by the rules determined by the relevant ministries (14). It is mandatory for these drivers to attend driver behaviour improvement training. In this way, it can be expected that the number of individuals who exhibit the risky behaviour of drinking and driving will decrease. This training, which aims to raise awareness among drivers about their own driving identities, ensure their own control, provide risk warnings, and ensure compliance with the rules (9, 12), is carried out under the coordination of the Provincial Health Directorate. The certified psychiatrists, general practitioners, psychologists, and traffic educators provide this training. Drivers attend the training in groups of up to 15 people. The training, which requires attendance, lasts 4 weeks, one day a week. During the training, participants were subjected to psychological interviews, physical examinations, and psychiatric tests. As a result of the interviews, those who are deemed suitable to participate in the training continue their training, and if deemed necessary, tests and examinations may be requested, and they may be referred to the Health Board or Alcohol and Drug Addicts Treatment and Research Centre. After the completion of the training process, successful drivers are given an appointment by the training unit to meet a psychiatrist within the first three months. Because of this monitoring-evaluation meeting, successful drivers are given a Driver Behaviour Development Training (DBDT) Certificate. Drivers who are deemed unsuccessful in this training are retrained in subsequent groups (16).

The sample of this study is a very specific group. To put it more clearly, studies conducted with drivers who were detected driving under the influence of alcohol, had their licences confiscated for two years, and who participated in driver behaviour development training are quite limited. It is also noteworthy that no study conducted with this group in Antalya could be found. This study aimed to determine the 2019 profile of drivers who were detected by security forces while driving under the influence of alcohol for the second time in Antalya and whose licences were confiscated for two years and who were required to attend driver behaviour development training in order to get their licences back. It is thought that the results of the study will shed

light on determining risk groups, increasing the effectiveness of education programmes, preventing the recurrence of crime, developing policies and laws, and conducting social awareness studies.

The research questions are as follows:

1. What are the defining characteristics of the people participating in DBDT?
2. What are the vehicle usage characteristics of the people participating in the DBDT?
3. What are the situations in which people participating in DBDT are involved in a traffic accident?
4. What is the smoking, alcohol, substance and medication use status of the people participating in DBDT?
5. What are the reasons why people who participate in DBDT drink alcohol?
6. What are the alcohol use behaviours of the people participating in DBDT?
7. What are the alcohol use disorder statuses of the people participating in DBDT?

MATERIALS and METHODS

Participants

This research is a retrospective registry study. In the study, the files of 601 drivers who applied to the Antalya Provincial Health Directorate Public Health Presidency Tobacco and Other Addictive Substances Unit in 2019 and participated in driver behaviour development training were examined. The files include the forms applied to the individuals who participated in the driver behaviour development training of the unit. These forms are filed in personal folders in the unit.

Measures

In the study, the introductory information used by the Republic of Turkey Ministry of Health for the drivers participating in the training, the Inventory of Reasons for Drinking, the Alcohol Use Disorders Identification Test (AUDIT), and the CAGE (Cut down, Annoyed, Guilty, Eye-opener) Test information in the files were examined.

Introductory Information

This is the form used by the Provincial Health Directorate Tobacco and Substance Addiction Unit. The form contains 43 items, including age, gender, marital status, education, employment status, place of residence, chronic disease, driving history, accidents, penalties, substance and medication use status, and accident information of the driver participating in the training.

Drinking Motives Questionnaire (DMQ-R)

Cooper (1994) developed this questionnaire. The inventory consists of 20 items. It measures four different reasons for alcohol use: enhancement, conformity, coping, and social motives (17). Individuals indicate their reasons for drinking alcohol on a 5-point Likert-type scale (1=never, 5=always). Subscale scores were obtained by summing the responses to the 5 items of each subscale (min-max=5-25). A high score from any subscale indicates what the person attributes his/her alcohol use to, regardless of the frequency of alcohol use. Cooper (1994) found the internal consistency coefficients of the reasons for drinking subscales for enhancement, conformity, coping, social to be .88, .85, .84, and .85, respectively. Topuz (2004) made the Turkish adaptation (18). Because of the exploratory factor analysis, Topuz found four factors as in the original form. The distribution of the items to the factors also matches the distribution in the original form. The internal consistency coefficients for the coping, social, enhancement, and conformity motive subscales were determined as .88, .88, .86 and .79, respectively.

Alcohol Use Disorders Identification Test (AUDIT)

This test, which can be used by health professionals in primary care (19), was adapted into Turkish by Saatçioğlu, Evren, and Çakmak (2002) (20). The test consists of 10 items. Participants made each statement on a five-step scale ranging from “Never = 0”, “Once a month or less = 1”, “Two or four times a month = 2”, “Two or three times a week = 3 and “Four or more times a week = 4”. The score obtained from the scale varies between 0 and 40, with a cut-off point of 8 (harmful use). According to this test, a total score of ≤7 indicates harmless alcohol use, while a score of 8 or above indicates harmful alcohol use."

It is in the harmful drinking group.

CAGE (Cut down, Annoyed, Guilty, Eye-opener) Test

The CAGE (Cut down, Annoyed, Guilty, Eye-opener) test is a widely used test for screening alcoholism developed by Ewing (1984) (21). The scale determines whether a person has an alcohol dependence problem. It consists of four questions with yes/no answers. The evaluator evaluates the test based on the number of 'yes' answers the person gives. If the number of "yes" given to the questions in the test is one, it indicates that the person has an alcohol use disorder by 35%, two by 75%, three by 95% and four by 100%. In the study conducted

by Arıkan et al. (1991) (22), the reliability of the CAGE test for the diagnosis of alcoholism in our country was determined.

Procedure

This research is a retrospective record study. No data was collected by the researcher, but the data collected from drivers who participated in driver behaviour development training in 2019 were evaluated by the unit. The data in the forms stored in the files were transferred to the statistical programme in the computer environment at the institution (Provincial Health Directorate) by the researcher. For this purpose, data entry was made for the files filled between 01.01.2019 and 31.12.2019 within the scope of the research. Before the research, the World Medical Association (WMA) Declaration of Helsinki was signed by all researchers, and approval dated 05.02.2020, numbered 127 from the Clinical Research Ethics Committee of the university, and written institutional permission from the Provincial Health Directorate was obtained.

Statistical Analysis

The SPSS (Statistical Package for Social Science) 23.0 programme was used for the statistical analysis of the data obtained because of the research. Categorical data are given with percentages, and continuous data are given with mean, standard deviation, and maximum and minimum values.

RESULTS

According to the information obtained from the forms filled out by the participants in the DBDT unit, the average age of the participants was 41.47±10.46, 98% were male, 61.9% were married, 76.5% had a high school degree or lower, 65.9% lived in the city centre, and 88.5% were employed. It was determined that 16% of the participants had a chronic disease and 37.5% of those diagnosed with a chronic disease had cardiovascular disease (Table 1).

Table 1. Introductory characteristics of the participants in the DBDT

Socio-Demographic Characteristics	x̄±SD	Min-Max
Age (years)	41.47±10.46	22-74
	n	%
Under 35	182	30.3
35-44 years old	198	32.9
45-54 years old	143	23.8
55-64 years old	64	10.7
Ages 65 and over	14	2.3
Gender		
Female	12	2.0
Male	589	98.0
Marital Status		
Married	372	61.9
Single	229	38.1
Educational Status		
Primary school	166	27.6
Middle school	96	16.0
High school	198	32.9
University	133	22.2
Postgraduate	8	1.3
Location		
Province	396	65.9
District	197	32.8
Village	8	1.3
Working Status		
Working	532	88.5
Not working	20	3.3
Retired	49	8.2
Presence of Chronic Disease		
Yes	96	16.0
No	505	84.0
Chronic Disease Name (n=96)		
Diabetus Mellitus	28	29.2
Cardiovascular Diseases	36	37.5
Musculoskeletal Diseases	14	14.6
Other (Haemophilia, migraine, eye disease, prostate, gastritis, etc.)	18	18.7

x̄: Mean**; SD:** Standard Deviation**; Min:** Minimum**; Max:** Maximum

Of the drivers participating in the DBDT, 77.9% used their own vehicles, 67% had a "B" type driving licence, and 56.9% received their driving licence in 2000 or later. 41.6% of the participants had driven for 20 years or longer, and 35.6% of them drove more than twice a day. 50.1% of the participants had an average urban speed of more than 51 km/h, and 40.4% had an average intercity speed of more than 91 km/h. 29.2% of the participants stated that they felt anger/rage when they were caught for drunk driving for the second time (Table 2).

It was determined that 59.2% of the participants in the DBDT had no accidents, 31.6% had accidents with material damage, 5.5% had accidents with injuries, and 0.5% had fatal accidents in the last five years when they were driving without alcohol. It was determined that 51.0% had no accidents, 40.8% had accidents with material damage, 6.2% had accidents with injuries, and 0.5% had fatal accidents when they were driving under the influence of alcohol (Figure 1).

Table 2. Vehicle usage information of people participating in the DBDT

Vehicle Owner	n	%
Own vehicle	468	77.9
Workplace vehicle	133	22.1
Driving Licence Type		
A2	9	1.5
B	403	67.0
C	40	6.7
D	5	0.8
E	130	21.6
F	13	2.2
G	1	0.2
Driver's Licence Year		
1999 and before	241	40.1
2000 and later	342	56.9
No response	18	3.0
Daily Driving Frequency (n=570)		
I don't drive every day	164	27.3
Once a day	64	10.6
Twice a day	128	21.3
More than twice a day	214	35.6
No response	31	5.2
Vehicle Driving Time (Years) (x̄±SD; Min-Max)	18.99±9.04	3-47
Vehicle Driving Time	**n**	**%**
20 years and more	250	41.6
19 years and less	336	55.9
No response	15	2.5
Average Urban Speed (km/h) (x̄±SD; Min-Max)	58.86±11.04110	40-110
Average Urban Speed	**n**	**%**
50 km/h and below	283	47.1
51 km/h and above	301	50.1
No response	17	2.8
Intercity Average Speed (km/h) (x̄±SD; Min-Max)	94.93±13.93	60-145
Intercity Average Speed	**n**	**%**
90 km/h and below	337	56.1
91 km/h and above	243	40.4
No response	21	3.5
Feelings of Being Caught a Second Time		
Anger/Rage	175	29.2
Why is all this happening to me?	97	16.1
Other	310	51.6
No response	19	3.1
Annual km travelled (x̄±SD; Min-Max)	13441.13±45713.70	500-302000

When the smoking, alcohol, substance and medication use status of the participants in DBDT was examined, it was seen that 77.9% had a smoking habit, 43.1% drank alcohol several times a week, and 14% used recreational drugs. It was also determined that 13.5% of the drivers used medication due to illness, 13.3% used medication together with alcohol, and 10.8% used psychiatric medication (Table 3).

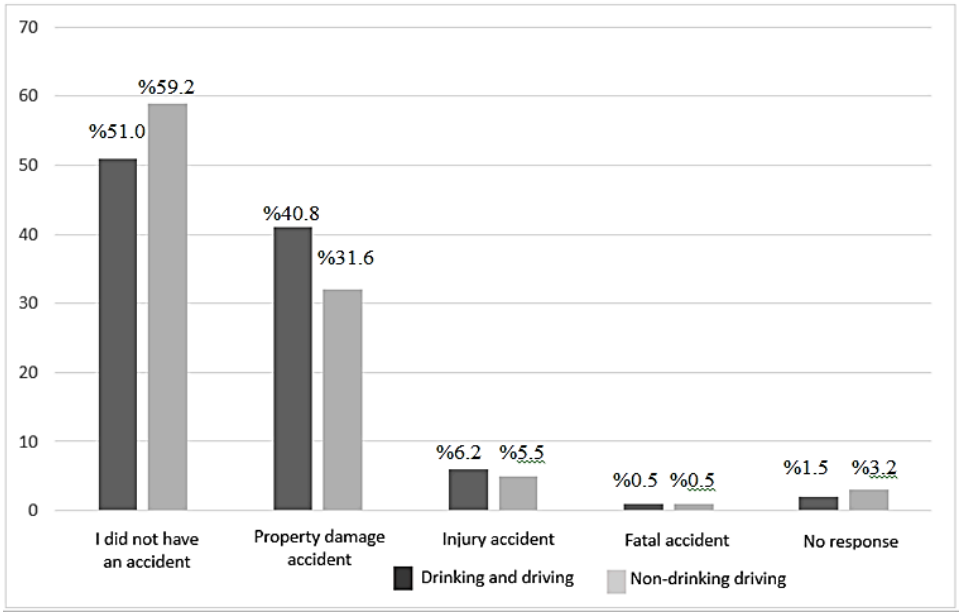

Figure 1. Traffic accidents in which participants in the DBDT had drunk and non-drinking driving in the last five years

Table 3. Smoking, alcohol, substance and medication use status of the participants in the DBDT

Smoke	n	%
Yes	468	77.9
No	129	21.4
No response	4	0.7
Alcohol		
Every day	15	2.5
Several times a week	259	43.1
Several times a month	258	42.9
Quit	58	9.7
No response	11	1.8
Recreational substances		
Yes	84	14.0
No	512	85.2
No response	5	0.8
Use of medication due to illness		
Yes	81	13.5
No	515	85.7
No response	5	0.8
Use of drugs with alcohol		
Yes	80	13.3
No	516	85.9
No response	5	0.8
Psychiatric medication use		
Yes	65	10.8
No	531	88.4
No response	5	0.8

The mean scores of the participants in the DBDT regarding the reasons for drinking were determined to be 5.66±2.91 for conformity, 7.33±4.16 for coping, 8.62±3.83 for enhancement and 9.94±4.64 for social. In the AUDIT, 31.8% of the participants were found to have "harmful alcohol use behaviour" and according to the CAGE test, 48.6% had a 75% alcohol use disorder (Table 4).

Table 4. Reasons for drinking, alcohol use behaviours and alcohol use disorders of individuals participating in the DBDT

Drinking Motives (n=587)	x̄±SD	Min-Max
Enhancement	8.62±3.83	0-20
Coping	7.33±4.16	0-21
Conformity	5.66±2.91	0-20
Social	9.94±4.64	0-25
AUDIT	**n**	**%**
Harmful alcohol use (8 points and above)	191	31.8
Harmless alcohol use (7 points and below)	359	59.7
No response	51	8.5
Drinking Motives (n=587)	**x̄±SD**	**Min-Max**
CAGE Test (n=590)		
No alcohol use disorder.	98	16.3
35% alcohol use disorder	133	22.1
75% alcohol use disorder	292	48.6
95% alcohol use disorder	61	10.1
100% alcohol use disorder	6	1.0
No response	11	1.9

AUDIT: Alcohol Use Disorders Identification Test; **CAGE:** Cut down, Annoyed, Guilty, Eye-opener

DISCUSSUION

Demographic, behavioural, and psychological factors at the individual level are important determinants of the likelihood of DUI (Driving under the influence) offenders to reoffend. There are significant associations between DUI and age, ethnicity, education, employment status, income, and marital status (23). In this study, the average age of drivers whose licences were revoked for driving under the influence of alcohol for the second time was 41.47±10.46, and 63.2% of them were under the age of 45. When different studies conducted with DBDT participants are examined, it is seen that the average age is 39.92±10.55 (24), 38.90±9.35 (12), 40.86±9.44 (9). As understood from the studies, the participants in the training were from the young age group. It is also seen that accidents mostly occur in the young age group (25). According to the results of a study conducted in Samsun, approximately 23% of young drivers reported that they had driven while under the influence of alcohol once or more in the last month (26). Age is considered an important factor in driving while under the influence of alcohol. In this study, 98% of the drivers whose licences were confiscated for driving while under the influence of alcohol for the second time were male. Similarly, in the study by Yeşil et al. (2020), 96.9% of the participants were found to be male (27). Most drivers in Turkey are male drivers, and alcohol consumption is much higher in men than in women. An examination of driver's licence ownership by gender reveals that 71.8% of drivers in our country are male (28). In one study, the total number of drivers who tested positive for drink-driving was 1241, 1133 of whom were male (29). In one of the studies on female drivers, which is rarely conducted in our country, 300 people were studied in Konya and in the study, the rate of women complying with traffic rules in places where there is no traffic police was found to be 80% and that of men was 53% (30). From another perspective, in a study conducted with 1242 cases for which a report was requested regarding the effect of alcohol on safe driving, it was determined that 96% of these cases were male (31). In fact,

in our country, alcohol consumption is higher in men than in women (32).

In the study, 61.9% of the drivers whose licences were revoked for a second time due to drink-driving were married. In different studies, the marital status of men was found to be 70.8% (24), 32% (33), 51.3% (34), 45%, and 51% for women (29). Studies have shown that single people are at a higher risk of driving under the influence of alcohol (27). Although single people are seen to have a higher risk of driving under the influence of alcohol, studies have found that the rate of married people is higher. The fact that people with this average age are married in our study is an expected result.

In a study, it was determined that approximately 40% of the participants had less than a high school education, 38% had a high school education, and approximately 14% attended university, but only 3% had completed university (33). In another study, it was seen that 29.2% of the participants had middle school, 26.4% had college, 24.3% had high school, and 20.1% had primary school education (35). Similar to our study, the educational backgrounds in the studies were similar, with more primary, secondary, high school, and university graduates, and fewer had postgraduate education.

In this study, 65.9% of the drivers lived in the city centre. According to Møller et al. (2015), driving under the influence of alcohol is less common in big cities because cars are more accessible and more police checks are expected. At the same time, substance abuse, alcohol disorders and daily high alcohol consumption are increasing problems in rural areas (34). In this study, it is thought that the high rate of living in the city centre, the fact that the city where the research data were taken is active in terms of tourism and the abundance of entertainment venues may be factors.

In this study, 77.7% of the participants were in other professions (freelance, tradesman, etc.), 13.3% were workers, 9% were civil servants, and 3.3% were unemployed. Since the data were taken from the semi-structured interview forms, the "other professions" section could not be detailed. In the study by Tellioğlu et al. (2019), 39.7% of 356 people were freelancers, 20.6% were workers, 13.7% were drivers, 11.7% were retired, 7.4% were other, and 6.9% were civil servants (9). The results of the study showed that certain occupational groups, such as workers and migrant workers, exhibited significantly lower rates of speeding and drink-driving. Therefore, the occupational category was associated with drink-driving behaviour (36). As a result, considering that detailed information was not obtained from the form in the study and when looking at other studies, it is normal for there to be differences in terms of profession.

In the study, it was determined that 16% of the participants had chronic diseases and 37.5% of those diagnosed with chronic diseases had cardiovascular diseases. In a study, it was determined that 7.5% of the participants who participated in the DBDT training had chronic diseases and 92.5% did not have chronic diseases (27). It is thought that chronic diseases were low due to the low average age of the DBDT participants.

The legal speed limits that vehicles in Turkey must comply with are 50 km/h for cars, minibuses and buses within cities, 90 km/h for cars between cities, and 80 km/h for minibuses and buses (37). Although our study found that drivers were travelling at a speed close to the legal speed limit on average, it is seen that the tendency is higher speeds. Although there are no studies examining traffic violation information in the literature, a study conducted with drivers driving under the influence of alcohol found that the most frequently violated rules were speed limits and seat belt enforcement (38). Drinking and speeding violations are more likely to occur during the morning rush hour (07:00–08:59) and at night when there is no street lighting and visibility is low due to less police enforcement (36). Although no evaluation of hours could be made in this study, this information is important for risk reduction efforts.

Our study found that drivers whose licences were revoked for a second time due to drunk driving had higher rates of property damage and injury accidents when driving under the influence of alcohol than when driving without the influence of alcohol. Recently, it was found that the prevalence of alcohol among drivers who died in road accidents has not changed in the last 10 years, being approximately 25% in Norway, 31% in Finland, 32% in Sweden and 45% in Portugal (39). In a study, it was determined that there was an increase in injury-related deaths in those who had accidents while drunk (40). According to 2022 data, 0.8% of the faults causing fatal or injury traffic accidents and 0.9% of the faults caused by the driver in our country are due to drink-driving (10). In a study, 37.1% of 348 traffic accident cases were found to have alcohol in their blood and 55.4% of fatal traffic accidents were found to be positive (41). In this study, the number of fatal accidents involving alcohol and non-alcohol was found to be equal. However, the fact that approximately 2/3 of the participants drive every day means that the probability of encountering an accident is high. The alcohol-related accidents are less common in our country than in other countries. Consumption in Turkey is lower than in many other countries; in fact, it is about one-third of the average world consumption (32).

The study determined that most drivers whose licences were confiscated for driving under the influence of alcohol for the second time had a smoking habit. It was also determined

that they used recreational drugs, medication with alcohol, and psychiatric medication. According to TurkStat data, the rate of individuals who used tobacco every day in 2019 was 28%. The highest rate was in the 35-44 age group with 42.8%, and 41.3% of men and 14.9% of women used tobacco (42). Therefore, the rates obtained in our study are similar to the data from our country. Most drugs negatively affect driving skills, especially when used with alcohol or another drug. It is worrying that a significant number of drug users are not even aware that their driving is impaired (43). In one study, the smoking rate among drunk drivers was found to be 32.7%, the hookah smoking rate was 61.7%, and the substance use rate was 2.8% (44). In a study of 414 motorcyclists, the prevalence of drug and alcohol use less than two hours before driving was 15.5% and the rate of smoking was 37.4%. The reasons for motorcyclists consuming drugs and alcohol less than two hours before driving were listed as the pleasure of substance use (8.5%), increasing the emotional effects of drug use by riding a motorcycle (7.7%), making it a habit due to addiction (3.6%), more self-confidence (2.2%) and other reasons (1.5%) (45). The main findings of a study conducted in Norway with 9410 participants showed that 4.8% of the oral fluid samples taken from random drivers contained psychoactive substances. Apart from drugs, a relatively small amount of alcohol (0.3%) was detected (46). In a study conducted with male drivers participating in DBDT in our country, it was found that 80.2% of the participants smoked and 18.9% had tried substance use at least once in their lifetime (24). As can be seen from the studies, people who use alcohol may also be using another substance or psychiatric medication. Another study stated that smokers and those who have had problems with the law are at a higher risk of driving while intoxicated (27). In another study, the reasons for alcohol use of participants in the DBDT training were found to be similar in terms of social, environmental, psychological and economic stress factors. When these individuals were caught by the police for drunk driving for the second time, no difference was found between their reasons for use (19% financial difficulties, 15.6% illness, 11.6% divorce, 11.1% heavy workload, 10% leaving work, 9% family problems, 8.8% unemployment, 4% celebration-fun) (9). Various studies and this study have shown that people drink alcohol for social purposes at a significant rate. In this study, 31.8% of the participants showed a score of eight or above in the alcohol use disorder recognition test and “harmful alcohol use behaviour.” In addition, more than half of the drivers were found to have at least a 75% alcohol use disorder. A study comparing driving under the influence in Yinchuan and Guangzhou found that driving under the influence offenders in both cities started drinking in their first or second year as adults and had moderate alcohol problems. In Yinchuan, 70.8% of offenders were abusing alcohol at a moderate or higher level, while in Guangzhou, the rate was 55.5% (47). In the study conducted by examining the files of 393 students who had the DBDT between 2013 and 2017 at the Kütahya Public Health Centre, 11.7% of the group stated that they consumed alcohol 2-4 days a week, and 1.5% more than 4 days a week (9). Perhaps the most striking finding of our study is that more than half of the drivers had a major alcohol use disorder. It is quite obvious that this situation can also cause risky behaviours in drivers.

Limitations

The research data consists of the number of people who participated in a one-year driver behaviour development training at the Provincial Health Directorate and the data in the records. Therefore, the generalizability of the results to the whole country is limited. Since the data are based on self-reports, it carries the risk of social desirability bias. Participants might have responded to questions on sensitive issues, such as alcohol use, in a manner that does not entirely reflect the truth.

CONCLUSION

In this study, in addition to defining the demographic information of the drivers, it was determined that the rate of accidents involving material damage is high in drunk driving, the primary motives for drinking alcohol are social and enhancement, 60.8% have an alcohol use disorder of 75% or more, and approximately 1/3 of them exhibit "harmful alcohol use". In this context, it can be suggested that activities be carried out to raise awareness in the society, especially among men under the age of 45 (in areas such as media and social platforms, mosques, marketplaces, public education centres, coffee houses, drivers' rooms, driving schools) regarding the application areas, that civil society organisations participate in the activities, that drivers participating in the DBDT are regularly followed up in the long term and that they are retrained as needed, that laws and penalties regarding drunk driving are increased, that drunk driving inspections are implemented more frequently by security forces, that a DBDT digital registration system is established and that the registration data is added to personal health records, that the profile of drivers participating in the DBDT is evaluated in different provinces, that similar studies are conducted with different sample selections in various regions of our country regarding drunk driving, and that prospective cohort studies are conducted particularly in our country on this issue.

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Author Details

Türkan Üstündağ

[1] Antalya Provincial Health Directorate, Antalya, Türkiye

0000-0001-6070-0621

Arzu Akcan

[2] Associate Professor, Akdeniz University, Faculty of Nursing, Department of Public Health Nursing, Antalya, Türkiye

0000-0003-0503-2610 aarzu@akdeniz.edu.tr

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