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ORIGINAL ARTICLE

# Rising health problem of Türkiye, healthcare professionals' suicides in media

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#### Abstract

It is known that the risk of suicide increases in professionals who are frequently exposed to intensive and stressful working conditions. Health professionals may be susceptible to depression and suicide due to occupational stressors besides risk factors such as violence against healthcare professionals, mobbing and burnout. However, it is noteworthy that there is no institutional data or statistics regarding suicides of healthcare professionals, in Türkiye. In this context, we aimed to reveal sociodemographic characteristics and risk factors related to suicides of health workers by evaluation cases subjected to media. Due to the lack of detailed institutional data, we investigated national media releases and reports between 01/01/2010 and 31/12/2020 in order to extract data regarding suicides of healthcare professionals. Obtained data was discussed in the light of the related literature. During the study period, a total of 138 healthcare professionals were reported to have committed suicide, out of which 69 (50%) were male and 69 (50%) were female. The mean age of the presented cases was 34.79 years. It was determined that 68 (48.28%) victims were medical doctors, and the most frequent suicide method was drug intoxication with a rate of 36.23% (n=50). Health workers' suicides and dynamics have not been fully revealed and have not been studied sufficiently. In this regard, health policies and a professional approach need to be developed in the light of the information obtained through joint studies by Ministry of Health and Associations/Organizations of Healthcare professionals.

Keywords: Healthcare professional, suicidal risk factors, suicide, burnout, media

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## Introduction

Suicide is defined as an action taken with the intent to kill oneself, done with knowing that it would end in death, and either chosen or caused directly or indirectly by an action to which the deceased person is passively exposed [1-3]. When the data on suicide cases in Türkiye recorded between 2001 and 2019 are examined, it is seen that the suicide rate has been around 4 per hundred thousand, however in the evaluation of suicide by gender, it has been reported that men commit suicide approximately 2.4 times more frequently than women in these ten-year period [4].

Although there is different information in the conducted studies, there are studies in the literature that show that working in a fixed job and a regular financial income reduce the risk of suicide. However, it has also been reported that the risk of suicide is increased in some occupational groups such as soldiers, police officers and healthcare professionals, who are known to be exposed to intense and stressful working conditions more frequently [5]. In addition, it is considered that healthcare professionals with high labor intensity, apart from the stress situation that arises due to the nature of their work, can also push people to depression and suicide due to depressive situations such as violence against the healthcare worker, mobbing and burnout [6,7]. However, it is noteworthy that due to the lack of detailed institutional data on the characteristics of healthcare professional suicide cases, occupation-specific suicide risk factors could not be identified, and adequate prevention studies could not be conducted. In this context, the aim of this study is to evaluate the cases of suicide committed by healthcare professionals and reflected in national media, in order to discuss the frequency of suicide and risk factors that may lead healthcare professionals to commit suicide and to offer solutions.

## **Materials and Methods**

There is no institutional data presentation conducted to obtain data on the deaths of healthcare professionals. In our country, the data obtained from the Turkish Statistical Institute (TurkStat) and the autopsy statistics of the Council for Forensic Medicine do not contain specific data on healthcare professional deaths and in particular on healthcare professional suicides. In addition, there is no data on the deaths of healthcare professionals reported by the Ministry of Health and in the archives of healthcare professional organizations. At this point, by using the "document analysis" research method, news published in visual and printed media organs operating on a national basis was scanned and data on suicide cases of healthcare professionals reflected in the media was obtained.

In this study, healthcare professionals who were reported to have committed suicide, between 01/01/2010 and 31/12/2020, were investigated and recorded in which branch of the health sector they were employed, their age and if determined, the causes and methods of suicide with the document analysis method. Cases with unknown, suspicious or undetermined manner of death were excluded. It was determined that a total of 138 healthcare professional suicides were reflected in media reports between the specified dates. The obtained data were discussed in the light of literature findings.

## Results

It was observed that 69 (50%) of 138 healthcare workers were male and 69 (50%) were female, which were reflected in the media reports that he committed suicide during the specified time interval. The average age of the presented cases was calculated as 34.79 years (SD = 10.51) (Table 1). It was observed that 68 (49.28%) of 138 cases of healthcare professionals were medical doctors. The distribution of the cases according to the professions is shown in Table 1.

Among the methods chosen by healthcare professionals to commit suicide, drug intoxication comes first with a rate of 36.23% (n=50). Drug intoxications are followed in frequency by jumping from height, hanging, firearm wounds, stab wounds (Figure 1).

When the distribution of the number of healthcare professional suicide cases reflected in the media is examined by years, it is seen that while 11 cases of suicide were detected in 2010, 3 of whom were medical doctors, and 24 cases, 10

of whom were physicians, committed suicide in 2020 (Figure 2).

Although there is information for only 46 (33.33%) cases about the factors that push healthcare professionals to suicide in the media news that were scanned, it was stated that 21 (15.22%) of the cases had a previously known diagnosis of depression. The distribution of the factors stated as the underlying reason for suicide by the media organ is shown in Figure 3.

## Discussion

According to TurkStat data, it is seen that the frequency of suicides is close to horizontal in the entire Turkish population, but in the light of the data obtained in our study, it is noted that the number of suicides seen in healthcare professionals has increased especially in recent years [4]. Just as the reasons for this relative increase among health workers need to be investigated, whether the frequency of suicide among health workers is more frequent in Turkish society than in the rest of society and/ or other professional groups is another issue that needs to be investigated. Since the causes of death and the issues related to deaths are not examined in the TurkStat data in relation with the professions, it is of great importance to carry out descriptive studies in this regard. When the literature on the subject is examined, it is reported that the frequency of suicide in both medical doctors and other healthcare professionals has increased compared to those of employees in other occupational groups, and this increase is more pronounced in women [8-11].

As a result of a petition by a Member of Parliament that contains questions about healthcare professionals who have committed suicide in the last five years back from 2018, the number of health worker suicides for 2015, 2016, and 2017 has been investigated and presented by the Ministry of Health. According to this data, 180 healthcare professionals including 10 medical doctors in 2015, 129 healthcare professionals including 11 medical doctors in 2016, 122 healthcare professionals including 3 medical doctors in 2017 have committed suicide. In three

**Table 1.** Data about age at death, sex and profession of cases.

Age at Death	Minimum	19 years		
	Maximum	70 years		
	Mean	37.79 years		
	SD	10.51 years		
Sex	Male	n=69	50%	
	Female	n=69	50%	
	Total	n=138	100%	
Profession	Medical Doctor	n=68	49.28%	
		Academician	n=4	2.9%
		Resident	n=12	8.7%
		General practitioner	n=14	10.14%
		Specialist	n=38	27.54%
	Dentist	n=6	4.35%	
	Midwife	n=2	1.45%	
	Nurse	n=48	34.78%	
	Healthcare Officer	n=4	2.9%	
	Healthcare Technician	n=10	7.25%	
	Total	n=138	100%	

years of time interval between 2015 and 2017, 431 healthcare professionals including 24 medical doctors have committed suicide. However, the source of this data presentation and the age, gender, occupation, division, cause of suicide, method of suicide, institution where he worked, and medical history etc. other important details have not been shared by the Ministry of Health. If the accuracy of the numerical data of the Ministry of Health is accepted, it is observed that only 4% of the healthcare professional suicides that occurred in the mentioned threeyear interval were covered by the media. In addition, when the data were compared, it was seen that 70.83% of medical doctor suicides and 0.05% of other healthcare professional suicides were featured in the media as news. This finding shows that medical doctor suicides can find a greater place in the media than other healthrelated occupations.

It seems possible to say that male gender is dominant in suicide cases [12]. This situation is clearly reflected also in TurkStat statistic reports [4]. However, in studies conducted on medical doctors, it is seen that suicide rates of female and male physicians are close to each



**Figure 1.** Distribution of suicide methods preferred by the subjects (DI: drug intoxication, JfH: jump from height, FA: firearm, SW: stab wounds).



Figure 2. Number of healthcare professional suicides reflected in the national media by years (M.D.: Medical doctors).

other in the corrections made considering the low number of female employees, even though males are superior in number in physicians who commit suicide [8-10]. In the present study, it was determined that the data on suicide cases that took place in the media were similar to the literature.

As a result of the document analysis we conducted, it is seen that the average age of healthcare professionals reflected in the media as suicide cases is 34.79 years (SD=10.51). In a study conducted in Australia that investigated the suicides of healthcare workers between 2001 and 2012 [11], it is seen that the average age of medical doctors who died as a result of suicide is 44.7 years, the average age of nurses and midwives is 44.1 years, and the average age of other healthcare professionals is 40.3 years. In a systematic review examining medical doctor suicides that occurred in Britain [9], medical doctor suicides appear to have increased significantly in individuals between the ages of 40 and 49. When compared with these data, although the data in our study are limited, it is one of the predictable results that the age of suicide in healthcare workers is relatively low in Türkiye.

In a study by Milner et al. [11], it is stated that drug intoxication increases significantly as a method of suicide in healthcare professionals who have easy access to drugs. Unfortunately, since our study did not have enough data about the phenomena to create statistical significance, an evaluation could not be made on this issue. However, in the light of the data obtained, the most common suicide method used in our cases is drug intoxication, which is consistent with the literature. When the population of the whole country is considered, it is seen that the most frequently used suicide method in Türkiye is hanging [4]. However, hanging was the third most common method among the cases included in our study.

According to official statistics recorded between 2001 and 2019 in Türkiye, it has been determined that the most common factor causing suicide is mental disorders [4]. Although it has been observed that many of the suicide cases that we have scanned from the media news do not include factors that can push the cases to suicide, depression is the most common factor that can lead to suicide. Diagnosis of depression, which is one of the main risk factors on the road to suicide [13], it is seen that 21 (15.22%) of 46 cases, who we could find information about risk factors, have a previously known depression diagnosis. Considering that suicide is seen more frequently in healthcare professionals, it becomes necessary to follow healthcare professionals who are diagnosed with a major risk factor for suicide, such as depression, more closely. It is thought that establishing such a follow-up system by both the Ministry of Health and healthcare professionals' organizations and trade unions of healthcare professionals may be beneficial in



Figure 3. The distribution of the factors stated as the underlying reason for suicide in healthcare professional suicide cases.

reducing these deaths.

In healthcare professionals, it is known that, apart from the stress situation that arises due to the nature of the profession with high labor intensity, suppressive situations such as "mobbing" and "burnout" can push people to depression and suicide [6,7]. Consistent with this information, it is noteworthy that two cases included in our study had alleged mobbing. In Türkiye and in the world, many health institutions have been establishing anti-mobbing boards in order to detect mobbing cases and to prevent possible victimization. However, the fact that healthcare professionals still experiencing mobbing, which accelerates professional alienation and is a risk factor on the road to suicide, shows that the studies conducted are not sufficient yet. Job loss/unemployment are among the known risk factors for suicide. In this context, suicides seen as a result of job insecurity, dismissal/ leaving and unemployment among physicians and healthcare professionals are among the problems that we may face in the coming days [14]. It is seen that five cases in our study committed suicide after being dismissed from the profession. In these cases, it is thought that it will be beneficial to have support programs for professional organizations and professional solidarity organizations and to direct people to professional help, when necessary, in order to prevent suicide.

## Conclusion

The suicides of healthcare professionals appear to be a subject whose dynamics have not been fully revealed in our country and has not been studied sufficiently. The fact that institutions or organizations in Türkiye do not have a unit where they examine suicides of healthcare professionals or store statistical information causes inadequacy in identifying and intervening in the factors that push healthcare workers to suicide, and it also constitutes the greatest limitation of this study. In our study, the main limitation is the inability to reach every information in every case and the irregularity of the data, since the information was obtained by scanning the media news archives. It is necessary to establish an infrastructure in this regard, to

record the suicides of healthcare workers in a common data pool by performing psychological autopsies, and to establish health policies and professional support programs in the light of the information obtained from this data pool. In this regard, professional organizations, Ministry of Health unit administrators should develop solution-oriented policies by determining the situation in healthcare professional suicides and implement these policies.

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#### **Conflict of Interest**

There is no conflict of interest between the authors concerning the materials or methods used in this study or the findings specified in this paper.

#### References

- Dolinak D, Matshes E. Death certification. In: Dolinak D, Matshes E, Lew E, editors. Forensic Pahology Principles and Practice. London, UK: Elsevier Academic Press; 2005. 663-8 p.
- Akçan R, Eren A, Yıldırım MŞ, Çekin N. A complex suicide by vehicle assisted ligature strangulation and wrist-cutting. Egypt J Forensic Sci. 2016;6(4):534-7. doi: 10.1016/j.ejfs.2016.06.009.
- Akçan R, Yıldırım MŞ, Lale A, Heybet ER. Cinayet-kompleks intihar: İkili ölümün nadir bir alt tipi (in Turkish). Dicle Med J. 2016;43(2):367-70. doi: 10.5798/diclemedj.0921.2016.02.0698.
- TurkStat (2021, September 10). TurkStat Suicide Statistics, 2020. Retrieved from https://data.tuik. gov.tr/Bulten/Index?p=Olum-ve-Olum-Nedeni-Istatistikleri-2019-33710
- Milner AJ, Niven H, LaMontagne AD. Occupational class differences in suicide: Evidence of changes over time and during the global financial crisis in Australia. BMC Psychiatry. 2015;15:223. <u>doi:</u> 10.1186/s12888-015-0608-5.
- Leach LS, Poyser C, Butterworth P. Workplace bullying and the association with suicidal ideation/thoughts and behaviour: A systematic review. Occup Environ Med. 2017;74(1):72-9. doi: 10.1136/oemed-2016-103726.
- 7. Howlett M, Doody K, Murray J, LeBlanc-Duchin

D, Fraser J, Atkinson PR. Burnout in emergency department healthcare professionals is associated with coping style: A cross-sectional survey. Emerg Med J. 2015;32(9):722-7. <u>doi: 10.1136/emermed-2014-203750.</u>

- Schernhammer ES, Colditz GA. Suicide rates among physicians: A quantitative and gender assessment (meta-analysis). Am J Psychiatry. 2004;161(12):2295-302. <u>doi: 10.1176/appi.</u> <u>ajp.161.12.2295.</u>
- Hawton K, Clements A, Sakarovitch C, Simkin S, Deeks JJ. Suicide in doctors: A study of risk according to gender, seniority and specialty in medical practitioners in England and Wales, 1979-1995. J Epidemiol Community Health. 2001;55(5):296-300. doi: 10.1136/jech.55.5.296.
- Lindeman S, Läärä E, Hakko H, Lönnqvist J. A systematic review on gender-specific suicide mortality in medical doctors. Br J Psychiatry. 1996;168:274-9. doi: 10.1192/bjp.168.3.274.
- Milner AJ, Maheen H, Bismark MM, Spittal MJ. Suicide by health professionals: A retrospective mortality study in Australia, 2001-2012. Med J Aust. 2016;205(6):260-5. doi: 10.5694/mja15.01044.
- 12. Bertolote JM, Fleischmann A. A global perspective in the epidemiology of suicide. Suicidologi. 2015;7(2):6-8. <u>doi: 10.5617/suicidologi.2330.</u>
- O'Neill S, Ennis E, Corry C, Bunting B. Factors associated with suicide in four age groups: A population based study. Arch Suicide Res. 2018;22(1):128-38. doi: 10.1080/13811118.2017.1283265.
- Johansson SE, Sundquist J. Unemployment is an important risk factor for suicide in contemporary Sweden: An 11-year follow-up study of a crosssectional sample of 37.789 people. Public Health. 1997;111(1):41-5. doi: 10.1038/sj.ph.1900317.