Medical grounds for suspending the professional licence of physicians and dentists by Regional Medical Councils between 1990 and 2014

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Summary

Aim. The professions of physician and dentist are associated with multiple health risks. The aim of this study was to identify the medical conditions that caused limitation or suspension of the professional licence of Polish physicians and dentists, and to assess their return to professional activities.

Material and methods. We analyzed documentation of Regional Medical Registers concerning the procedure for suspending medical licences or limiting certain medical activities, and decisions of Regional Medical Councils in 1990–2014.

Results. The data on 65 decisions suspending the professional licence, 8 decisions limiting the licence and 1 revoking the right to practice have been obtained from 8 Councils. The most frequent cause of limiting or suspending the professional licence was drug and alcohol dependence (54.1%). There was no correlation between the underlying medical condition and gender or profession (physician/dentist). Among doctors aged 42–57 and 58–67 whose licence had been suspended or limited, more than 60% suffered from substance use disorder (SUD). In the group of doctors aged 41 and younger, no such case was found. Among doctors older than 67, addiction was the cause of 37.5% of decisions suspending or limiting the professional licence. In no case the medical condition causing limitation or suspension of the licence was an occupational disease. SUD was more frequent in surgical than non-surgical specialties (76.5% vs. 46.9%, p < 0.05). The doctors suffering from addictions were more likely to return to their practice (57.5%) than those suffering from other illnesses (20.5%, p < 0.05).

Conclusions. The most common medical ground for limiting or suspending the professional licence was substance abuse. Number of decisions suspending or limiting the licence is relatively small and indicates a need for more efficient procedures for identification of

doctors and dentists incapable of practicing due to health problems and assessment of the capacity to practice in the case of individuals who do not undertake treatment themselves and therefore are unable to assure sufficient quality of care to their patients. Moreover, although few decisions were issued, there is a need for an active addiction prevention, particularly among surgical specialists.

Key words: physicians, dentists, occupational diseases, addiction, Chambers of Physicians and Dental Practitioners

Introduction

The working environment of physicians and dental practitioners is full of different health hazards. They are caused by many physical, chemical, biological and psychological factors. Between 1994-2008 over 14 thousand cases of occupational diseases among healthcare and social workers were reported. The most common ones were infectious and parasitic diseases, voice disorders, skin diseases, diseases of musculoskeletal system, central nervous system diseases and vibration syndrome [1]. Among dental practitioners the most common occupational diseases are chronic musculoskeletal disorders resulting from the way dentists work (mainly epicondylitis of the humerus and carpal tunnel syndrome), chronic peripheral nervous system diseases, vibration syndrome, infectious diseases and skin diseases [2].

Doctors' health condition becomes a concern for the medical self-government in Poland the moment when it influences their capability to practise. Among the 25 tasks of the Polish Chamber of Physicians and Dental Practitioners listed in the Act on Chambers of Physicians one of the most important is supervising the proper and conscientious exercise of the profession. The professional self-government awards the right to practise the profession of a physician or dentist but can also limit, suspend or revoke the professional licence. The Polish Legislator handed the task of conducting the proceedings for ascertaining the inability to practise medicine or the inadequate preparation for the profession to the professional self-government of doctors [3]. Article 12 of the Act on Professions of Physician and Dentist states that if a Regional Medical Council (the Chamber's executive organ) has a reasonable suspicion that a doctor is unable to fully perform his profession due to his health condition, the Council appoints a Commission, which states whether the doctor is able to practise [4]. The Commission consists of doctors, who are members of the relevant Regional Chamber, have the right to practise for at least 7 years and specialise in a required branch of medicine. The Commission, in order to give its statement, conducts a medical examination of the doctor, and if needed, can order specialist tests or observation in a medical facility. It can also ask for a supplementary specialist opinion by physicians specialising in the required branch of medicine. The time

that the Commission has to provide the Regional Medical Council with its opinion should not exceed 3 months [5]. The doctor has a duty to appear before the Commission and undergo the necessary tests; refusal to do so results in the decision to suspend or limit the licence. The doctor has the right to indicate another doctor who is not a member of the Commission to serve as a trusted representative. Basing on the Commission's statement, the Regional Medical Council can decide to suspend or limit the professional licence for the time of the inability to practise. The concerned doctor has the right to attend the Regional Medical Council's meeting when his case is discussed. He also has, in the case when the Council decides to limit or suspend his licence, the right to ask the Council to repeal that decision when its medical grounds cease to exist, but not sooner than 6 months after the decision was made. Additionally, doctors have the right to appeal the decision of the Regional Council to the Supreme Medical Council [4, 5].

The procedure described above is usually applied in the cases of doctors who have not begun treatment and starts after the organs of the medical self-government receive information or a complaint about professional misconduct of a doctor, which includes working under influence of alcohol or other psychoactive substances.

The aim of the research presented in this article was to: (1) define the medical grounds for limiting or suspending professional licences of doctors in Poland between 1990 and 2014, (2) analyse the length of time of suspension or limitation of the licence, depending on the type of illness, (3) determine whether the medical grounds for limiting or suspending the professional licence were related to the profession (physician/dentist), gender, age and specialty, (4) assess the number of doctors returning to practise after licence suspension, and (5) identify the factors influencing the return to work in the profession.

Research material and methods

The authors asked all 24 Regional Chambers of Physicians and Dental Practitioners in Poland to complete a questionnaire regarding the decisions of Regional Medical Councils in the proceedings for ascertaining the inability to practise medicine between 1990 and 2014, based on the data from the regional registers of doctors. The questionnaire consisted of questions regarding the gender, year of birth, specialisation, being a member of the Regional Medical Council, type of decision by the Regional Council (suspension or limitation of licence) and the year of issue, as well as the diagnosis. The authors also inquired about the length of time of licence limitation/suspension, and whether the doctor returned to professional work after the period of licence suspension/limitation. Piotr Kordel et al.

Eight Regional Chambers answered (Regional Chambers in Bydgoszcz, Gdańsk, Łódź, Olsztyn, Poznań, Rzeszów, Toruń and The Military Chamber of Physicians in Warsaw). In total, in December 2014 they had 53 019 members actively practising medicine, which was 32% of all doctors in Poland. In the analysed period, the Regional Medical Councils in those Chambers decided to suspend or limit the professional licence of 52 physicians and 22 dentists. As can be observed in Figure 1, most cases took place in the Regional Chambers in Gdańsk, Poznań and Rzeszów. The Military Chamber of Physicians, at the same time, did not make any decision of that kind.



Figure 1. The number of decisions on the inability to practise or limiting the professional licence of physicians and dentists in the years 1990-2004 in 8 Regional Chambers of Physicians (N=74)

The number of the decisions limiting or suspending the professional licences of doctors due to their health condition in all analysed Chambers did not exceed 8 cases per year (see Figure 2).

For statistical analysis the authors used the software SPSS v.20. When assessing the interdependence of the variables, the Pearson's χ^2 and contingency coefficient C tests were used.

Results

Among the doctors whose cases were analysed, 70.3 % were physicians and the remaining 29.7% were dentists. This proportion resembles the one in the general population of Polish doctors in which, according to the data of the Supreme Medical



Figure 2. The number of decisions on the inability to practise or limiting the professional licence of physicians and dentists issued by Regional Chambers of Physicians

Council, by the end of the year 2014, 79% of Polish doctors were physicians and 21% were dentists. In the studied sample 56.8% of doctors were male, which differs from the value of this parameter in the whole population – by the end of the year 2014, male doctors comprised only a little above 39% of the total number [6]. The mean age of doctors at the moment of issuing the decision on limiting or suspending their licence was 50.2 years, for women 49.9 years and for men 50.4 years. The youngest doctor in the studied group was 30 years old, and the oldest 91 years old. In terms of age, the studied group did not differ much from the general population of doctors in Poland, in which the mean age was 48.5 years in 2014.

The health causes of limiting or suspending the professional licence were very diverse. In the documents of the Regional Chambers of Physicians and Dentists, the authors distinguished 20 different diagnoses resulting in limiting or suspending the doctors' professional licence. All of the health reasons could be divided into two major groups: substance use disorder and other (Table 1).

Medical condition	N	%
Substance use disorder	40	54.1
Other illness	34	45.9
Total	74	100

 Table 1. The medical conditions causing limitation or suspension of the professional licence in the years 1990-2014

The most common reason for limiting or suspending the professional licence was substance use disorder (SUD) – 54% of all cases. The substances to which the doctors were addicted were alcohol (38.2% of all 74 cases), illicit drugs (8.2%) and medications (2.8%). Three doctors were dependent on both alcohol and illicit drugs at the same time (4.1%). In the 'Other' group the most common diagnoses were schizophrenia (16.2%), bipolar disorder (2.7%) and paranoid (delusional) disorder (2.7%). There were also single cases of cognitive impairment, such as Alzheimer's disease, psychoorganic syndrome, depression and delusional disorder. One case concerned a doctor with profound hearing loss. One doctor had his licence limited due to old age (91 years old). In nine cases (12.2% of all cases) the records of the regional registers of doctors do not specify which mental illness was the reason for limiting/suspending the licence.

The Regional Medical Councils, basing on the Commissions' statements, usually decided to suspend the professional licence (87.8%). The Councils limited the licence only in 8 cases (10.8%). In one case (1.4%) the Council decided to revoke the doctor's licence permanently.

The limiting/suspending of the professional licence procedure regulations state that the suspension or limitation of the professional licence should last as long as the inability to practise. The majority of Regional Medical Councils' decisions set the time of limitation/suspension in that manner; however, in 24% of cases the Councils decided to specifically define that time (Table 2). In two cases it was decided to suspend/limit the doctor's licence permanently. The first one was a 91-year-old doctor who still worked in his private office – his licence was permanently limited, while the other was a case of a mentally ill doctor whose licence was permanently suspended.

Duration of suspension/limitation	N	%
For the duration of the inability to practise	46	62.2
4 years	2	2.7
3 years	1	1.4
2 years	4	5.4
1.5 years	2	2.7
1 year	5	6.8
6 months	9	12.2
Permanent	2	2.7
For the duration of the procedure to assess ability to practise	3	4.1

Table 2. The period of limitation or suspension of the professional licence

The statistical analysis of the gathered data showed no correlation between the diagnosis and the Regional Medical Councils' decisions whether to suspend or limit

doctors' professional licence. Also there was no correlation between the diagnosis and the period for which the right to practise was limited. One of the aims of the study was to verify if there were some connections between the health condition resulting in limiting/suspending the professional licence and the demographical features, profession and specialty of doctors. Both gender and profession (physician/dentist) did not show any correlation with the reason why doctors had their licence limited or suspended (p > 0.05). The variables that correlated with the diagnosis were age and physicians' specialisation (dentists were not included in this analysis). Table 3 shows that substance use rates were the highest among doctors between 42 and 57 years of age (63.6% of doctors in that age group suffered from substance dependence) and doctors between 58 and 67 (68.4%). Other health conditions were more common among doctors younger than 41 and older than 67. In the case of this analysis, the authors decided to exclude the case of the 91-year-old doctor who had his licence limited due to his old age.

		Medical condition					
		Other		Substance use disorder		Total	
		N	%	N	%	N	%
Age (in years)	≤41	5	100.0%	0	0.0%	5	100.0%
	42 – 57	12	36.4%	21	63.6%	33	100.0%
	58 – 67	6	31.6%	13	68.4%	19	100.0%
	> 67	10	62.5%	6	37.5%	16	100.0%
	Total	33	45.2%	40	54.8%	73	100.0%

 Table 3. The age and the medical conditions causing limitation or suspension of the professional licence

 $Chi^{2}(1) = 10.45; p < 0.05; C \approx 0.35$

The next variable which correlated with the health condition that influenced physicians' ability to practise was the medical specialty. The physicians whose cases were analysed represented 15 different specialties. The most common among them were internal medicine specialists (25%), gynaecologists (13.5%) and surgeons (11.5%). For the needs of this study the authors decided to divide all the specialties into two groups: surgical and non-surgical. Three physicians were not included in this analysis, because it was impossible to assign them to either of the groups (a medical intern, a physician without a specialty and in one case the records lacked that information). As can be seen in Table 4, among physicians who had their licence suspended or limited due to SUD there were significantly more doctors representing surgical specialities.

		Specialty					
		Surgical		Non-surgical		Total	
		N	% of N in the column	N	% of N in the column	N	% of N in the column
	Other	4	23.5%	17	53.1%	21	42.9%
Medical condition	Substance use disorder	13	76.5%	15	46.9%	28	57.1%
	Total	17	100.0%	32	100.0%	49	100.0%

 Table 4. The specialty and the medical condition causing limitation or suspension of the professional licence

Chi²(1) = 3.9; *p* < 0.05; C = 0.3

The authors have analysed how many doctors managed to return to practising medicine after limitation or suspension of their licence. Out of 74 doctors, 40.5% managed to recover and returned to work. Gender, age and profession did not significantly correlate with the return to work (p > 0.05). The variable that demonstrated a significant correlation with regaining the full professional licence was the diagnosis responsible to its prior limitation/suspension. As can be seen in Table 5, 57.5% of doctors suffering from SUD returned to practise, while among doctors suffering from other health conditions the rate reached only 20.5%. The average time after which doctors regained their licence was 31.8 months. None of the variables mentioned before correlated with the duration of licence suspension.

 Table 5. Medical condition causing limitation or suspension of the professional licence and number of physicians and dentists returning to practise

Medical condition	Return to practise			
	Yes (N, %)	No (N, %)	Total (N)	
Substance use disorder	23 (57.5)	17 (42.5)	40	
Other illness	7 (20.5)	27 (79.5)	34	
Total	30 (40.5)	44 (59.5)	74	

 $Chi^{2}(1) = 10.38; p < 0.002; C \approx 0.3$

Discussion

The prevalence of alcohol dependence among Polish doctors is unknown. In other countries it is estimated that it matches the scale of the problem in the general population [7-9]. The most widely researched aspect of alcohol abuse among doctors is hazard-ous drinking, whose prevalence rate reaches over a dozen per cent [7, 9]; however,

a German study shows that it can be a problem that affects almost 30% of physicians and dentists [10].

There are also no data on drug abuse and dependence among Polish doctors, which according to research, is the second most common SUD among doctors [11, 12]. Unlike alcohol dependence, the prevalence rate of drug dependence among doctors is significantly higher than in the general population [13]. The substances to which doctors are addicted are usually benzodiazepines and opioids [11, 14]. In the USA, it is estimated that 10-12% of doctors (some publications mention that even up to 18%) suffer from substance abuse during their professional career [8, 15]. The study results regarding the causes of licence suspension/limitation seem to confirm that in Poland SUD among doctors is also a significant problem. Unfortunately, the records of the regional registers of doctors are not precise enough to determine in every case to which substance the doctor was dependent on.

The number of cases in which the Regional Medical Councils decided to limit or suspend the doctor's licence due to a health problem seems low. Basing on the data provided by 8 Regional Chambers of Physicians and Dental Practitioners, which represent 1/3 of Polish doctors, the authors could assume that the total number of cases of limiting/suspending the professional licence between 1990 and 2014 would not exceed 220. This shows that, on one hand, Polish doctors were able to solve their health problems without the assistance of the Chambers; on the other hand, that the system of gathering information about cases where the Chamber should intervene was not working properly. Since 2007 the task of identifying doctors' health problems which may result in their inability to work lies in the hands of Regional Councils' Representatives for Doctors' Health. Their tasks are to contact doctors who need treatment, help them organize the treatment and monitor its progress [16]. Occupational diseases were not the reason for proceedings aimed at ascertaining the inability to practise medicine. This might be because a doctor suffering from an occupational disease is less likely to refer himself or herself to the professional doctors' governance, but instead to the District Labour Inspector and Social Insurance Institution in order to take advantage of the provisions granted by Article 6 of the Act on Social Insurance for Accidents at Work and Occupational Diseases [17]. The cases of occupational diseases among physicians and dentists do not require any actions of the professional self-government of doctors. This work is the first attempt to examine the medical grounds for the limitation or suspension of doctors' professional licence in Poland. We did not find any prior publications on the subject. Our study results seem to match the results of studies conducted in Belgium and Germany, which show that the prevalence of substance abuse (alcohol), especially hazardous drinking, is higher among doctors with surgical specialties [7, 9, 10].

The study showed that physicians and dentists who suffered from substance abuse regained their licences significantly more often than those who had other medical conditions. The average time of recovery was less than three years. This proves the effectiveness of the system, designed by the Chambers, which provides assistance for the doctors. It consists of the Regional Councils' Representatives for Doctors' Health, who are usually psychiatrists, SUD treatment clinics cooperating with the Regional Chambers and financial support for families of doctors who decided to start the treatment [16]. In the USA, where similar recovery programs for doctors exist, the number of patients returning to practising medicine is very high, reaching 70-90%, similarly as in pilots [8, 18]. The American Physician Health Programs (PHPs), which have been operating since the 1970s, are based on rising awareness of the problem among physicians, they promote early detection, assessment, evaluation of SUDs and swift intervention. Physicians suffering from SUD sign contractual agreements detailing the course of the usually 5-year treatment program, the terms of support and progress monitoring as well as the consequences of relapses. The program participants are referred to abstinence-oriented (usually) residential treatment for 60 to 90 days. This is followed by 12-step-oriented outpatient treatment in AA (Alcoholics Anonymous), NA (Narcotics Anonymous) groups or in collegial support associations for recovering health professionals. Physicians then receive randomly scheduled urine monitoring for substance use, whose frequency is quite high -48times on average during the first year of the program [19-21]. Interestingly, as a 2013 study shows, the PHPs have another positive result - the physicians that ended the program successfully showed lower malpractice risk than other physicians [22]. Our research also demonstrated that a correlation exists between the doctors' age and the diagnosis resulting in limitation/suspension of the professional licence. Physicians and dentists in age groups 42-57 and 58-67 were the ones who predominantly had their licence limited/suspended. This tendency might result from the fact that the more experienced doctors are more vulnerable to stress than their younger colleagues, because they hold managerial positions more often and take greater responsibility for the patients' treatment effects. Belgian and German studies also show that alcohol abuse prevalence is lower in younger doctors than those above 40 [7, 9, 23]. Unfortunately, the quantity of data the authors managed to collect is insufficient to precisely define the inability to practise medicine risk factors. The authors assume that the majority of doctors suffering from different heath conditions in Poland limit their professional activity in accordance to their health status and there is no reason for the Chambers of Physicians and Dental Practitioners to conduct the proceedings for ascertaining the inability to practise medicine. It is only done in situations when, despite serious health problems which doctors cannot control, doctors continue to

work and become a threat to their patients. In the case of doctors, this problem is especially complex as they have the skills and knowledge to disguise the early symptoms of illness [8, 24]. The health condition becomes apparent in a late stage when they cannot control their behaviour any more – this refers mainly to substance use disorder. In such cases, swift and decisive actions are recommended [8]. The data analysed in this study suggests that the Polish Chambers of Physicians and Dental Practitioners implement those rules. However, in order to precisely diagnose the problem of substance use disorders among Polish doctors and the effectiveness of treatment, a more detailed study should be conducted.

Conclusions

- 1. The most common reason for conducting the proceedings for ascertaining the inability to practise medicine by physicians and dentists is substance abuse.
- 2. The assistance provided by the Polish Chambers of Physicians and Dental Practitioners to their members suffering from SUD is effective and most of the doctors recover and return to practising medicine in less than 3 years.
- 3. Unlike doctors suffering from health conditions other than substance abuse, whose return to practise depends mainly on medical factors, doctors suffering from substance use disorder can be helped by an early intervention which can prevent the progress of the disease and the disorganisation of the life of an addicted doctor. The small number of cases of that type handled by the professional self-government of doctors in Poland suggests that the Chambers of Physicians should be more active in identifying addicted doctors.

References

- 1. Wilczyńska U, Szeszenia-Dąbrowska N. Choroby zawodowe wśród pracowników ochrony zdrowia i pomocy społecznej w Polsce. Med. Pr. 2010; 61(6): 597-605.
- 2. Tuszyński K, Lella A. ed. Choroby zawodowe lekarzy stomatologów. Gdańsk: Via Medica; 2009.
- 3. Ustawa z dnia 2 grudnia 2009 r. o izbach lekarskich (Dz. U. z 2009 r. Nr 219, poz. 1708 z późn. zm.).
- 4. Ustawa z dnia 5 grudnia 1996 r. o zawodach lekarza i lekarza dentysty (Dz. U. z 2011 r. Nr 277, poz. 1634).
- 5. Rozporządzenie Ministra Zdrowia z dnia 3 listopada 2011 r. w sprawie trybu powoływania i sposobu działania komisji orzekającej w przedmiocie niezdolności lekarza do wykonywania zawodu albo ograniczenia w wykonywaniu ściśle określonych czynności medycznych (Dz. U. z 2011 r. Nr 246, poz. 1475).

- Naczelna Izba Lekarska (2016). Zestawienie liczbowe lekarzy i lekarzy dentystów z podziałem na izby lekarskie, tytuł zawodowy i płeć. Stan na 31.12.2014. Dane uzyskane z Centralnego Rejestru Lekarzy RP.
- Rosta J. Hazardous alcohol use among hospital doctors in Germany. Alcohol and Alcoholism 2008; 43(2): 198–203.
- Berge KH, Seppala MD, Schipper AM. *Chemical dependency and the physician*. Mayo Clin. Proc. 2009; 84(7): 625–631.
- 9. Joos L, Glazemakers I, Dom G. *Alcohol use and hazardous drinking among medical specialists*. Eur. Addict. Res. 2013; 19(2): 89–97.
- Pförringer D, Mayer R, Meisinger C, Freuer D, Eyer F. Health, risk behaviour and consumption of addictive substances among physicians – Results of an online survey. J. Occup. Med. Toxicol. 2018; 13: 27.
- 11. Carinci AJ, Christo PJ. *Physician impairment: Is recovery feasible?* Pain Physician 2009; 12(3): 487–491.
- 12. Brooke D, Edwards G, Taylor C. *Addiction as an occupational hazard: 144 doctors with drug and alcohol problems.* Br. J. Addict. 1991; 86(8): 1011–1016.
- Domenighetti G, Tomamichel M, Gutzwiller F, Berthoud S, Casabianca S. *Psychoactive drug* use among medical doctors is higher than in the general population. Soc. Sci. Med. 1991; 33(3): 269–274.
- 14. Baldisseri MR. Impaired healthcare professional. Crit. Care Med. 2007; 35(2): S106–S116.
- 15. Boisaubin EV, Levine RE. *Identifying and assisting the impaired physician*. Am. J. Med. Sci. 2001; 322(1): 31–36.
- Uchwała Naczelnej Rady Lekarskiej Nr 7/07/V z dnia 13 kwietnia 2007 r. w sprawie organizacji systemu pomocy lekarzom i lekarzom dentystom, których stan zdrowia ogranicza lub uniemożliwia wykonywanie zawodu.
- 17. Ustawa z dnia 30 października 2002 r. o ubezpieczeniu społecznym z tytułu wypadków przy pracy i chorób zawodowych (Dz. U. z 2002 r. Nr 199, poz. 1673).
- McLellan AT, Skipper GS, Campbell M, DuPont RL. Five year outcomes in a cohort study of physicians treated for substance use disorders in the United States. BMJ 2008; 337(7679): 1154–1156.
- DuPont RL, McLellan TA, Carr G, Gendel M, Skipper GE. How are addicted physicians treated? A national survey of physician health programs. J. Subst. Abuse Treat. 2009; 37(1): 1–7.
- 20. DuPont RL, Compton WM, McLellan AT. *Five-year recovery: A new standard for assessing effectiveness of substance use disorder treatment.* J. Subst. Abuse Treat. 2015; 58: 1–5.
- 21. Brooks SK, Gerada C, Chalder T. *Review of literature on the mental health of doctors: Are specialist services needed?* J. Ment. Health 2011; 20(2): 146–156.
- Brooks E, Gendel MH, Gundersen DC, Early SR, Schirrmacher R, Lembitz A et al. *Physician health programmes and malpractice claims: Reducing risk through monitoring.* Occup. Med. (Lond.) 2013; 63(4): 274–280.

- 23. Voltmer E, Schwappach DLB, Frank E, Wirsching M, Spahn C. *Work-related behavior and experience patterns and predictors of mental health in German physicians in medical practice.* Fam. Med. 2010; 42(6): 433–439.
- 24. McBeth BD, Ankel FK. Don't ask, don't tell: Substance use by resident physicians. Acad. Emerg. Med. 2006; 13(8): 893–895.

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