



Mental Health Care Gap: The Case of the Slovak Republic

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Published online: 29 June 2019

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Abstract

This study explored unmet mental health and social care needs in the Slovak Republic and their adverse human rights consequences. We estimated treatment gap for persons aged 15–64 years in year 2015 affected by depressive, anxiety, substance use and schizophrenic disorders by comparing local treated prevalence rates with population estimated rates for Europe. Two-thirds of people with depressive disorders and over 80% of those with anxiety disorders and alcohol dependence were not receiving treatment. There was no treatment gap for persons with schizophrenia. Fifty-one percent of those eligible for disability pension on the grounds of mental disorders failed to receive it. We discuss the implications of the estimated gaps in mental health and social care and consequent human rights violations that may result from the current system of mental health care in Slovakia.

Keywords Mental health · Care gap · Slovak Republic · Psychiatric disorders

Introduction

Mental disorders contribute significantly to disability globally, and they are expected to rise in the coming decades (WHO 2011; Patel et al. 2016). Yet, mental health care is not addressed in most countries to the same extent as physical health. WHO estimated that median mental health care spending in countries was 2% of government health budget with a large variation between regions and countries (WHO 2013, 2018). One of the outcomes of such meagre budgets is that many people with mental disorders remain untreated. In addition, research shows that there is a huge lag between the onset of mental disorders and the administration of treatment

(Demyttenaere et al. 2004; Joska and Flisher 2005; Prince et al. 2007; Shidhaye et al. 2015). Several reasons account for the treatment lag and gap, e.g., limited mental health literacy, stigma, and unavailability and inaccessibility of services (Kohn et al. 2004; WHO 2014).

Psychiatric care is only one component of a successful journey to recovery. In addition, there are a wide range of evidence-based psychosocial interventions that are essential to assure social integration or reintegration in the post-acute phase of illness (Mueser and McGurk 2004; Patel et al. 2016). A recent review concludes that interventions, e.g., counselling, mentoring, support groups, whether provided by specialists or by non-specialized health workers, increase the number of persons who recover from depression and/or anxiety, and improve the outcomes of care with regard to other mental disorders as well (van Ginneken et al. 2013).

Despite the evidence of the effectiveness of psychiatric treatment and psychosocial care, up to 90% of those that can benefit from both in low- and middle-income countries and more than two-thirds in Europe do not get such treatment and care (Saxena et al. 2007; Wittchen et al. 2011). In addition, the physical comorbidity that often accompanies mental disorders is not addressed properly or at all (Maj 2009; Saxena and Maj 2017). In summary, the whole spectrum of mental health care is supported by three pillars—psychiatric treatment, psychosocial care and physical care, and the

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absence of this is referred to as the care gap (Pathare et al. 2018).

Importantly, all those unmet needs are reflected in significant indirect costs (e.g., days of work lost, caregiver burden) (Shidhaye et al. 2015), and, more often than not are accompanied by human rights violations such as exclusion, marginalisation, and discrimination in the community (Drew et al. 2011).

Despite recognizing the importance for rational planning, there is limited data on unmet mental health care needs in the Slovak Republic. It is a high income European country (World Bank 2018) with a mental health care delivery system focused on psychiatric treatment (such as seeking restoration of health or relief of symptoms).

The aim of this study was to explore the gaps of mental health and social care needs of persons affected by selected psychiatric disorders—mood, anxiety, and schizophrenic disorders and alcohol dependence. The findings were compared with the situation in member states of the European Union, where population prevalence data for the same disorders are available.

Methods

Sources of Data

National data were obtained from the following government agencies in the Slovak Republic: 1. National Health Information Center (NHIC), 2. the Statistical Office and 3. the Social Insurance Agency.

1. NHIC provided information on the number of people treated in all public outpatient psychiatric services for the period 2002–2015 (accounting for 99% of mental health care in the country) and number of people hospitalized in 2015, for both the whole population and in the age group 15–64. General practitioners have limited competency and skills in the management of mental disorders and usually refer patients in need to outpatient psychiatric care (NHIC 2016). All other services, provided by psychologists, psychotherapists and social care agents are only supplemental (MPSVR 2014; Winkler et al. 2017).
2. The Statistical Office provided the total population data for the period 2002–2015 and for the age group 15–64 in 2015. We selected 2015 as the reference year since the prevalence rates of the studied disorders have been stable over the 13 year period (Fig. 1).
3. The Social Insurance Agency provided the data on the number of people receiving disability benefits (pension) resulting from the loss of working capacity due to men-

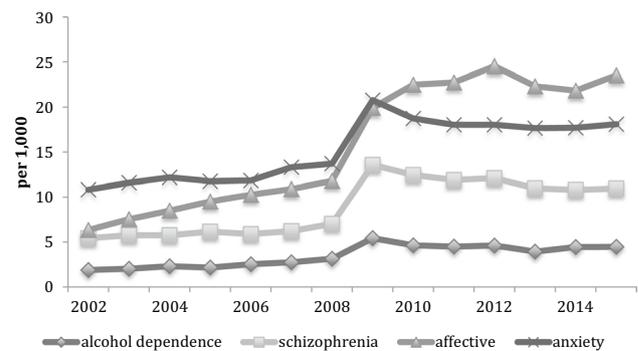


Fig. 1 Crude prevalence rates of ICD-10 diagnostic groups F3 (affective disorders); F4 (anxiety disorders); F10.2 (alcohol dependence); and F2 (schizophrenia) in outpatient psychiatric treatment in the Slovak Republic in the period 2002–2015

tal illness. We used this as a proxy measure of available social support (WHO 2018).

The data for the European mental disorder population rates were extracted from the Wittchen et al. (2011) study and reported as the median 12-month population prevalence rate based on 27 European Union (EU) countries. These data were used in the absence of a local population survey of mental disorders. The data represent the best available estimate of the mental disorder prevalence rates across Europe despite their limitation introduced by variability of methods used in the reviewed studies and were extrapolated for the Slovak Republic.

Data Description and Analysis

We calculated crude treated prevalence rates for the country of persons utilizing the specialized mental health care system. The rates were calculated per 1000 people and as a percentage of the population where applicable, for all the population in 10 year age groups, and for the age group 15–64. The denominator comprised the total population of the country in the specific age groups in the years 2002–2015, as well as by gender.

The treated prevalence rates were calculated for the following selected groups of mental disorders, as per the International Classification of Disease, 10th edition (ICD-10):

F30–F39 mood disorders (affective); F40–F48 anxiety disorders; F10.2 alcohol dependence; and F20–F29 schizophrenia.

For treated prevalence rates, we used the number of psychiatric health care visits reported as first time in a given year. Thus, every person that visited an outpatient clinic was counted once that year even if they had several visits. We added the number of people hospitalized in psychiatric

wards/hospitals for the first time in 2015, each service user was counted once only even if he/she was rehospitalized that year.

The crude treated prevalence rates were age-standardized to the European population for both the total population and by gender (Waterhouse et al. 1976).

To estimate the treatment gap we compared the treated prevalence data from the Slovak Republic (SR) with the European population data measured by a median 12-month population prevalence rate from 27 European Union (EU) countries (Wittchen et al. 2011). This comparison provided the estimated proportion of people not receiving treatment of all persons having a mental disorder in the country. Table 1 shows the structure of the data available for the Slovak Republic, derived from the national health care registry, and for the countries of the EU. The data provided in the SR for mood and anxiety disorders covered more diagnoses than in the EU review (e.g., dysthymia, dissociative disorders), since they encompassed the whole ICD-10 diagnostic groups. The EU prevalence rates may therefore slightly underestimate the rates for the full ICD-10 diagnostic groups.

To measure the psychosocial care gap we calculated the proportion of persons granted disability pensions due to a mental disorder of all those people that were granted disability pensions for any illness/disorder in 2015. We compared the findings with the average of the same indicator for the Organisation for Economic Co-operation and Development (OECD) countries, based on the analysis of data supplied by the respective national authorities (OECD 2010). Disability pension in the Slovak Republic is governed by Act no.461/2003 Coll. and is awarded by the Social Insurance Committee to a person who applies for it and provides proof of reduced working ability issued by an expert consultant.

Table 1 Comparison of the data structure for the Slovak Republic and in the European Union for ICD-10 diagnostic group codes

Disorder	Slovak Republic ^a	Europe ^b
Affective	F3x	F30, F31, F32, F33
Anxiety	F4x	F40.0, F40.1, F40.2, F41.0, F41.1, F42, F43.1, F45
Alcohol dependence	F10.2	F10.2
Schizophrenia	F2x	F2x

^aData source: National Health Information Center, national health care registry (NHIC 2016)

^bData source: Europe-based studies: affective disorders (major depression, bipolar disorder); anxiety disorders (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, specific phobias, obsessive compulsive disorders, posttraumatic stress disorder); schizophrenia—derived from several studies: some used narrow schizophrenia definition, and four studies a broader definition of psychotic syndromes (Wittchen et al. 2011)

Lastly, we listed the likely human rights violations originated by the gaps in treatment and psychosocial care based on the International Covenant on Economic, Social and Cultural Rights (1966) and the Convention on the Rights of Persons with Disabilities (2006), both ratified by the Slovak Republic.

Results

The prevalence rates of the studied mental disorders in the outpatient specialty system for the period 2002–2015 is shown in Fig. 1. As of the year 2009 the treated prevalence rates of anxiety disorders (F4), affective disorders (F3), schizophrenia (F2) and alcohol dependence (F10.2) have kept a stable trend.

Figure 2 shows treated prevalence rates for the selected mental disorders in 2015 by age groups. The age distribution shows that the majority of people undergoing treatment is in the age category 45–64 years.

Table 2 presents age-standardized prevalence rates for the age group 15–64 years old treated for the studied disorders compared with the estimated population mental disorder prevalence of EU-27 countries (Wittchen et al. 2011). Based on this comparison, we estimated that the proportion of people in the age group 15–64 having any of the studied psychiatric disorders and not receiving treatment (treatment gap) is 67%, 84% and 80% for those with affective disorders, anxiety disorders and alcohol dependence disorders, respectively. With regard to persons with schizophrenia almost equal rates of treated prevalence in the Slovak Republic (1.4% of population) were found than those reported for psychotic syndromes in the EU-27 (1.2%).

Table 3 presents disability pensions granted on the grounds of mental disorders as a proportion of all newly granted disability pensions in 2015 in Slovakia compared with the same indicator for selected OECD countries. We

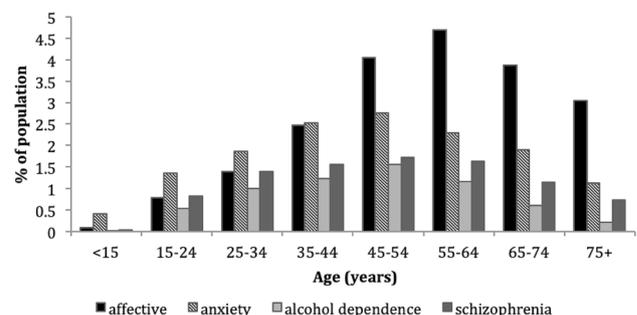


Fig. 2 Proportion of the population attending psychiatric clinics by ICD-10 diagnostic groups F3 (affective disorders); F4 (anxiety disorders); F10.2 (alcohol dependence); and F2 (schizophrenia) in the Slovak Republic in 2015 by age groups

Table 2 Treatment gap of selected mental disorders in the Slovak Republic

Disorder	Slovak Republic 2015 ^a % of population treated	EU-27 mean ^a population prevalence rates "Best estimate" ^a % (range)	Estimated treatment gap in the SR ^b % (range)
Affective	2.6	7.8 (0.2–10.1)	67 (0–73.6)
Anxiety	2.2	14.0 (9.2–29.8)	84 (76.3–92.7)
Alcohol dependence	0.65	3.4 (0.0–9.3)	80 (0–88.1)
Schizophrenia	1.4	1.2 (0.2–2.6)	0 (0–44.4)

^aFor the list of diagnoses, see Table 1

^bTreatment gap estimated proportion of persons in need of treatment in the Slovak Republic who do not receive it

Table 3 Disability benefits gap in the Slovak Republic

Population	All newly granted disability pensions in the SR in 2015 n (%)	Newly granted DP due to any mental disorder in 2015 in the SR (% of all newly granted DP)	DP due to mental disorders in OECD ^a Mean % of all new granted DP (range)	Estimated disability pension gap in the SR (%)
Total population	19239 (100.0)	3308 (17.2)	35 (26–47)	51 (33.9–63.4)
Males	10032 (100.0)	1598 (15.9)		
Females	9207 (100.0)	1710 (18.6)		

DP disability pensions, SR Slovak Republic

^aOECD publication (OECD 2010)–2008 survey of eight European Countries

Table 4 Areas of life where human rights of persons with mental disorders are likely violated due to treatment gap and psychosocial care gap in the Slovak Republic and corresponding articles of international treaties

Type of gap	Area of life	UN conventions–articles
Treatment gap	Diagnostic and treatment	CRPD: Art.25, Art.8 ICESCR: Art.12
Psychosocial care gap	Community services	CRPD: Art. 19, Art.25
	Psychosocial care	CRPD: Art. 19, Art.28
	Rehabilitation	ICESCR: Art.6

CRPD Convention on the Rights of Persons with Disabilities, ICESCR International Covenant on Economic, Social and Cultural Rights, Art. article

estimated that 51% of all persons eligible for disability pension due to mental disorder in the Slovak Republic are not receiving it.

Table 4 summarizes likely human rights violations that occur due to the identified treatment and psychosocial care gaps based on the Convention on the Rights of Persons with Disabilities (CRPD) and the International Covenant on Economic, Social and Cultural Rights (ICESCR).

Prevailing stigma and prejudice preventing people with symptoms of mental disorders from seeking help is, among other factors, a result of violation of Article 8 *Awareness raising* of CRPD. The treatment gap constitutes a violation

of the Article 25 *Health* of CRPD and Article 12 of ICESCR on the highest attainable standard of physical and mental health.

The psychosocial care gap violates the Article 26 *Habilitation and Rehabilitation* and Article 5 *Equality and Non-discrimination of CRPD*. Furthermore, by inavailability of psychosocial services the Article 19 *Living independently and being included in the community* and the Article 28 *Adequate standard of living and social protection*, both of CRPD, are violated.

Discussion

This study analyzed the treatment and psychosocial care gaps of selected mental disorders in the Slovak Republic and listed their possible consequences in terms of human rights violations. We have included those disorders that are both frequently present in the community and contribute to the higher proportion of the disease burden. We added schizophrenia as the most common representative of psychotic disorders that largely contributes to disability.

The main finding of the study is that the great proportion of people who need psychiatric treatment and psychosocial services do not receive it from the specialized services. As for the treatment gap, we estimate that the majority of those affected by any of the mental disorders examined in this study do not get any psychiatric treatment. The estimated

treatment gap for common mental disorders is even greater than the gap estimates for the European region (depressive disorders 67% vs 45%, anxiety disorders 84% vs 62% and alcohol dependence 80% vs 72%) (Kohn et al. 2004). Our estimates of the treatment gap in the Slovak Republic may be an underestimate as we rely on secondary data from European studies in the absence of any epidemiological data on prevalence from the Slovak Republic. Our approach yields crude estimation of the existing gaps in the Slovak Republic.

It also appears that the situation with respect to schizophrenia prevalence is comparable to the rest of Europe (Wittchen et al. 2011; Lora et al. 2012). One interpretation of these findings is that schizophrenia symptoms are more recognisable compared to other disorders and get the person (or their family) to seek out psychiatric treatment.

Our data suggest that the majority of people treated for the studied disorders in the Slovak Republic are in the age range of 45–64 years. This is at variance to the global disease age distribution for mental and substance use disorders, with a majority of persons in much younger age groups: 10–29 years old (Kessler et al. 2007; Whiteford et al. 2013). If our findings are confirmed, it suggests that people with mental disorders in Slovakia are being diagnosed and treated later in life. From our data it is difficult to exactly attribute this to one of the above.

Psychosocial care is represented by all non-health care system-based services enabling the person's rehabilitation and reintegration into society, and, ultimately, recovery.

One of the main obstacles to estimating the psychosocial care gap in Slovakia was the absence of data. Globally, according to the WHO Mental Health Atlas 2017, the governmental support provided to persons with severe mental disorders includes partial social care support and income support (WHO 2018).

Official data on the proportion of people with mental disabilities in the Slovak Republic that are employed are not available. The report of the Slovak branch of the international non-governmental organization Epic (Employment personalized assistance service) reports 70% of all people with disabilities in productive age are unemployed (EPIC 2014).

We compared the only relevant indicator available to us in the Slovak Republic—proportion of disability pensions granted due to mental disorder of all newly granted disability pensions in a given year (17.2%)—to the same indicator in the OECD report based on a survey performed in 2008 among eight European high-income countries (26–47%) (OECD 2010). Based on this comparison we estimated that 51% of persons that are eligible for the disability pension due to mental illness in the Slovak Republic are not receiving it. Apart from the OECD report there are several individual studies from different countries. For example, in the UK this proportion was 46% in 2014 while in 1995 it was 21%

(of all claimants for sickness and disability benefits) (Viola and Moncrieff 2016). The country of closest comparison to Slovakia is the Czech Republic where in 2015 the situation was similar, where 21% of all newly granted disability pensions were due to mental disorders. The proportion depends on the economic situation of the countries—there is evidence that the high income countries tend to grant disability pensions due to mental illness more often than lower income countries (WHO 2018). For example, a study from Georgia (lower-middle income country) showed only 10% of the total disability pensions were awarded to those with mental disorders in 2010 (Danelia et al. 2011).

In the Slovak Republic, other psychosocial care services such as community care, supported living and employment are almost non-existent (OECD 2014).

The gaps identified in our study result in numerous human rights violations.

The Slovak Republic has ratified the Convention on the Rights of Persons with Disabilities in 2010 and therefore is mandated to protect, promote and fulfill all the rights for its citizens with disability, including persons with mental illness. In order to meet the international obligations and improve quality of life of people living with mental disorders major reform of mental health care and related psychosocial care is urgently required.

A recent study of 24 central and eastern European countries concluded that many proposed mental health care reforms in these countries remain unimplemented (Winkler et al. 2017). In Slovakia, despite the formulation of the comprehensive reform dated back to 1991, mental health care is provided through the same basically unchanged structure as it was established in the second half of the previous century, with all the flaws, deficiencies or even wrongdoings. Our study is thus a call for action for the national policy makers and health planners.

Limitations

There are several limitations to our study related to the availability of data.

For calculating treatment prevalence, we used the first outpatient visit in the year, and first hospitalization in the year. Conceivably, some service users might have been treated both in the outpatient as well as in-patient settings in 2015. It was not possible to identify such individuals and this may have lead to an inflated estimate of those receiving care and treatment.

However, as majority of mental health care contacts are in the outpatient setting and total number of hospitalizations is relatively small (the hospitalizations are 1–2% of all contact visits, out-patient visits are 98–99% of all contact visits for

all studied disorders), we do not consider this to have a significant effect on our findings.

Questions may also be raised about using a reference study from Europe for comparison. We chose the Wittchen et al. (2011) study as this is the latest dataset from EU-27 countries providing 12-month population prevalence data.

Ideally, to correctly estimate population prevalence rates and calculate the treatment gap, a population survey should be performed. Our study does provide a quick (albeit not so accurate) measure of prevalence and treatment gap which may be sufficient for service planning purposes.

The OECD report we used for estimating gap in social support presented data on eight surveyed European countries only. The average proportion of people receiving disability benefits that we used to compare with Slovak data is therefore not representative for Europe or all OECD countries.

Lastly, we did not address the third pillar of the mental health care, the physical care gap in our study due to the lack of baseline data.

Conclusions

Mental health care in the Slovak Republic is organized with an emphasis on the medical (psychiatric) treatment and little emphasis on prevention and social care. Mental health continues to be organized and delivered as it was historically set up. All attempts at reform, including comprehensive reform proposed by the government in 1991, have so far failed and little has been implemented to date (Hašto et al. 1999). In our study we estimated large mental health care gap with majority of people in need of services not using them. In order to meet the needs of the population and stop the human rights violations resulting from the situation the state has to act—develop actions and support activities to raise mental health awareness and to establish community care.

Compliance with Ethical Standards

Conflict of interest The authors declare that they have no conflict of interest.

Research Involving in Human and Animal Rights The research did not involve human and/or animal experimentation.

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